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BUSINESS

JOURNAL OF MANAGEMENT



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BUSINESS

JOURNAL OF MANAGEMENT

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Some accounting machines are almost as complicated in construction as computers. Here is the control panel of an IBM model. A feature on the IBM 'computer game' appears on page 77.

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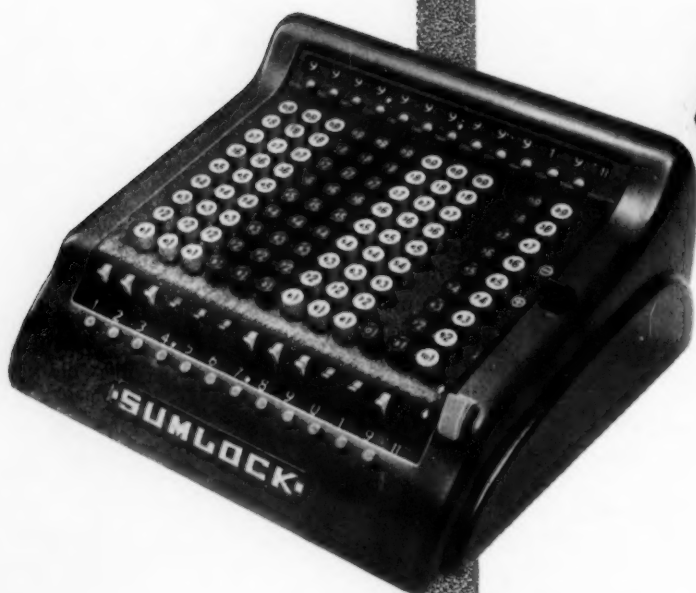
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ECONOMIC PROSPECT

Survey and Forecast of Business Conditions

Recovery under way

► The U.K. has passed the low point in its slight recession. Consumer goods industries have done well enough to raise the over-all production index for the last quarter of 1958. If this trend continues it should only be a matter of time before industrial investment again begins to expand—probably in the second half of this year.

► Steel output was 25 per cent below capacity at the end of last year, but demand has recently been improving. The better general tone of the U.K. economy, and the U.S. recovery, have improved prospects for the machine tool industry. Despite the continued fall in factory building orders, enquiries are rising.

Stocks likely to rise

► Another reason for optimism is the growing belief that stocks are unlikely to fall further, and may even rise fairly soon. Rising share prices, cheaper money, easier credit, stable wage rates and a fair prospect of lower taxation add further encouragement.

► Sterling continues strong. Gold reserves have risen by 65 per cent since the crisis month of September, 1957. Formal convertibility of current sterling publicly acknowledges this strength.

► The unusually high balance of payments surplus of £500 million for 1958 is unlikely to be repeated this year. When expansion of the home economy is resumed, we will no doubt import more from the primary producing countries. But there will be a time-lag before they buy from us. So our balance will suffer temporarily.

Room for expansion

► Meantime there are signs that the Government's chief problem—expanding the economy without raising costs—can be overcome. January issue of the National Institute Economic Review shows that industry has considerable surplus capacity and there is small risk of major raw materials price increases.

► Any efforts by this country to increase her world trade can have only limited success if the U.S. does not also adopt an expansionist policy. Fortunately, there seems every likelihood of this. American production, gross national product and profits are all up and still rising.

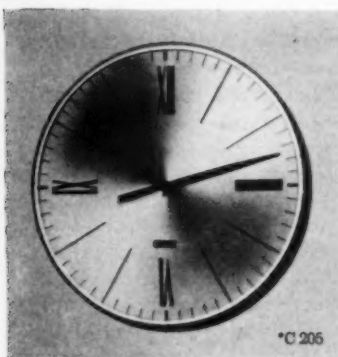
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* These Clocks have been accepted by the Council of Industrial Design for inclusion in Design Index.



*C 433



*C 206



C 206



*C 204



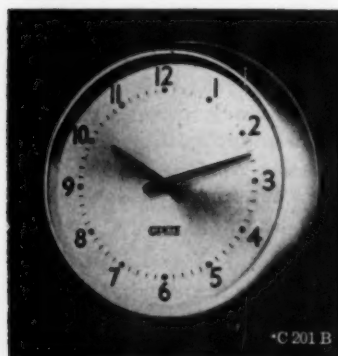
C 205 N



C 206 N

The model numbers given refer to Mains operated clocks but the same designs are available for operation on our Controlled Electric "Master" Clock System.

Details of our full range of clocks for Mains operation are given in our catalogue book 5 section 7 and for our Controlled Electric "Master" Clock System, in our catalogue book 5 section 1. The appropriate catalogue will be sent to you on request.



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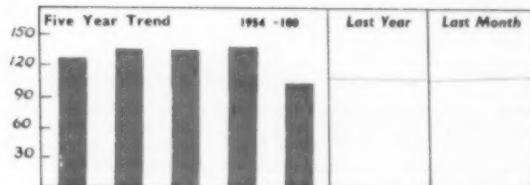
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PROCESS TIMERS · LIQUID-LEVEL INDICATING APPARATUS · DOMESTIC AND INDUSTRIAL BELLS AND BUZZERS, ETC.

STATE OF THE NATION

- Five key indicators to the state of the Nation, followed by 18 indicators to the main economic influences.

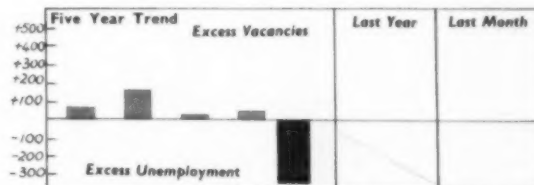
INDUSTRIAL PRODUCTION ►

Decline in output has been reversed, although a further fall cannot be ruled out. Last November's index was 113, compared with 110 in October, 107 in September, 90 in August, and 114 in November, 1957. Four years earlier the index was 139. The increase is due mainly to increased consumer goods production. Recently improved demand for steel may herald the start of real recovery.



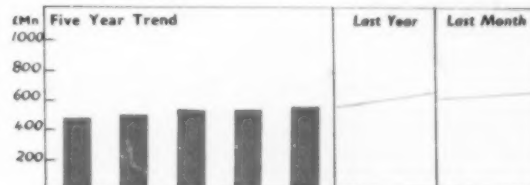
EMPLOYMENT POSITION ►

Unemployment figures do not seem likely to rise above 2.8 per cent. Excess number of unemployed over unfilled vacancies fell to 369,000 in December, compared with 377,000 in November. In December, 1957, there were 99,000 more unemployed than vacancies, but four years earlier there were 82,000 more vacancies than unemployed.



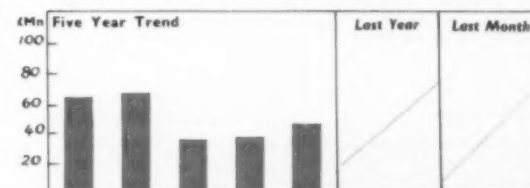
MONEY FLOW ►

Average daily bank clearings show that business money is circulating at a record speed. December daily average was nearly £650 million, about 8 per cent more than the November average. The average a year earlier was about £600 million. Four years earlier it was £515 million.



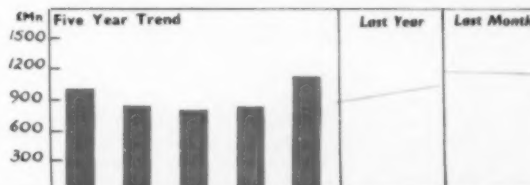
TRADE GAP ►

Gap between imports and exports has risen sharply, but should become more favourable. December excess of imports over exports has been placed provisionally at £73.7 million, compared with £9.2 million in November, £49 million in October, and £19.1 million in December, 1957. Four years earlier it was £49.1 million. The December movement was due partly to a rush to avoid new customs regulations, and probably to some stock-building also.



GOLD AND CONVERTIBLE RESERVES ►

Sterling area gold and convertible currencies remain strong. December reserves fell to £1,094 million from £1,146 million in November, but this drain was itself a sign of strength. It was a temporary result of the move to convertibility and repayment of the North American loan. A year earlier reserves stood at £810 million, and four years earlier at £986 million.



● KEY TO THE CHARTS. Bar charts show the 'Five Year Trend,' taking for each year the average monthly value during the most recent three months. Graph lines for 'The Last Year' compare the most recent month with the same month a year ago. Graph lines for 'Last Month' compare the most recent month with the previous month.

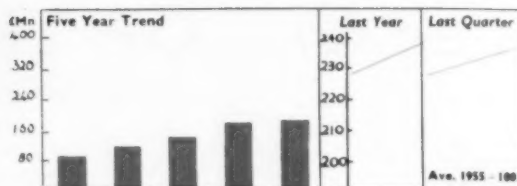
● READERS' ENQUIRIES. Spot enquiries by letter or telephone, involving no research, are answered free. More detailed enquiries will be charged for at cost, on the basis of professional staff time absorbed. This applies to both general management and economic enquiries.

MAIN ECONOMIC INFLUENCES on the STATE OF THE NATION

1. Trends in CAPITAL SPENDING

INDUSTRIAL INVESTMENT PLANS

Industry's over-all investment plans are still falling, but building inquiries are up. Third quarter spending last year was provisionally estimated at £238 million—4 per cent more than a year earlier. The increase in inquiries should start to produce firm orders fairly soon.



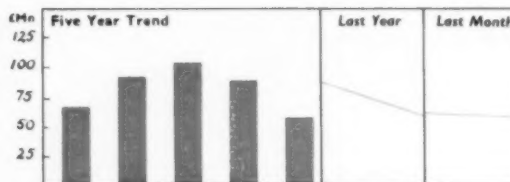
FACTORY BUILDING APPROVALS

Factory building approvals, although fewer, have not been as low as expected. Total area approved in the fourth quarter of last year was 11.3 million sq.ft.—2.5 million less than a year earlier, and the lowest figure since 1953. On the other hand the rate of decline seems to be flattening out. This may be followed by an actual rise later this year as production picks up.



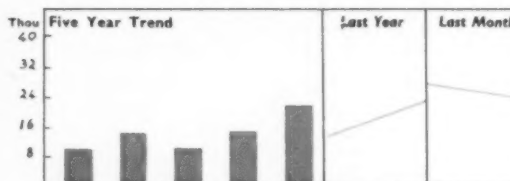
MACHINE TOOL ORDERS

Following another marked decline, the fall in machine tool orders may have levelled off. Latest available figures, for October, show £58 million orders outstanding—£2 million less than September and £24 million less than a year earlier. Later figures should reflect the 25 per cent increase in orders which took place last October.



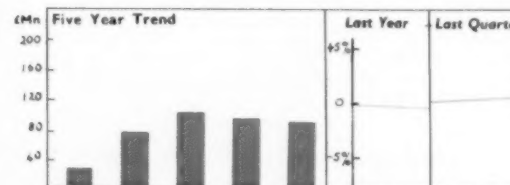
INDUSTRIAL HIRE PURCHASE

Industrial hire purchase is seasonally high but has fallen below the record level. The Board of Trade provisional index for industrial plant and equipment in November was 127, about 15 points lower than October, 38 points higher than September and 24 points above a year earlier. December H.P. sales of new cars and new and used commercial vehicles totalled 23,820, against 28,476 in November, 13,173 a year earlier, and 10,918 four years earlier.



MATERIAL STOCKS

Manufacturer's stocks fell by £36 million in the third quarter of last year. The drop was 1 per cent, compared with a rise of 2.1 per cent in the same quarter a year earlier. The probability now is that stricter accounting methods, plus businessmen's belief that material shortages will not recur, will lead them to hold lower stocks than formerly.



HOME BUILDING STARTS

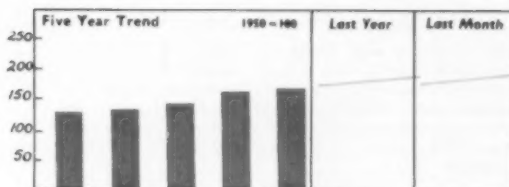
Home building starts continue at a reduced level which is not likely to fall further. The number of houses started in the third quarter last year—66,490—was 12 per cent less than in the preceding quarter and in the same quarter a year earlier. There may be a slight increase in the first half of this year, since new housing booked in the third quarter of 1958 was worth £128 million—£1 million more than a year earlier.



2. Trends in CONSUMER SPENDING

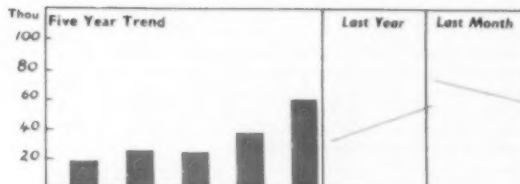
RETAIL SALES ►

Retail trade has recently reached new peaks, with Christmas sales an estimated 5 per cent higher than in 1957. The November index for all kinds of business was 172, against 162 in October, 165 a year earlier, and 141 four years earlier. Much of the increase was in sales by household goods shops. With H.P. restrictions completely gone, these were as much as 19 per cent above the level a year earlier.



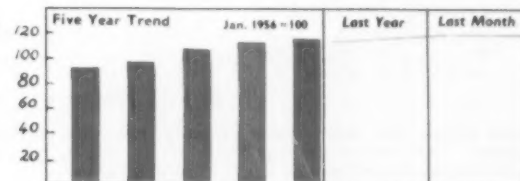
DOMESTIC HIRE PURCHASE ►

Domestic hire purchase sales have reached a record level. Board of Trade index for November was 222, 63 points above October, and 89 points above November, 1957. Used cars sold on H.P. contract in December totalled 54,413, against 71,718 in November, 53,500 in October, 31,417 in December, 1957, and 25,132 four years earlier.



WAGE RATES ►

Wage rates have levelled off recently, and no significant change is likely for a few months. Index for November was 115.8, compared with 115.6 in October and 114.1 in September. A year earlier the index was 112, and four years earlier 92. With only one new claim—of doubtful justifiability—to be settled, a period of stability seems likely.



PERSONAL EXPENDITURE ►

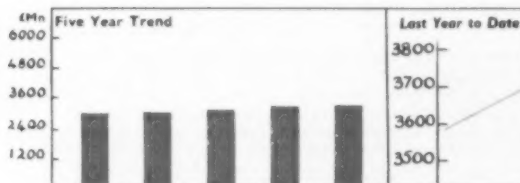
Personal expenditure may reach record levels this year. The latest available figure—for the third quarter last year—shows that spending then totalled £3,745 million compared with £3,689 million in the second quarter. Abolition of H.P. restrictions has greatly boosted spending on consumer durables, and this trend should continue.



3. Trends in PUBLIC SPENDING

PAYMENTS FROM EXCHEQUER ►

Expenditure to date this financial year is about £117 million more than a year ago. The latest figure of £3,707 million represents a fairly sharp increase over a year earlier. It is not likely, however, to increase very much.



EXCHEQUER DEFICIT ►

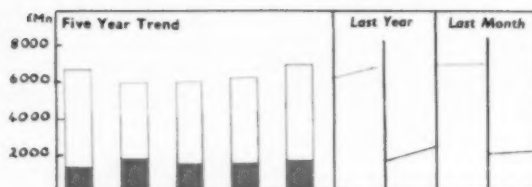
Exchequer deficit so far this financial year is about £20 million more than a year ago. This is a loss of about £76 million on the previous month's figure. Two months earlier there was a gain of £41 million. The increased deficit is due to more public spending by the Government.



4. Trends in CREDIT POLICY

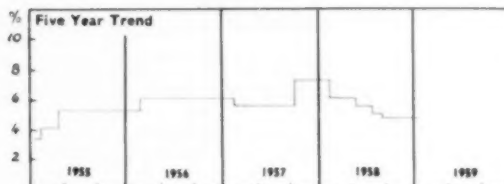
BANK DEPOSITS AND ADVANCES ►

Bank deposits and advances both continue their slight but steady rise. Total deposits at the end of November—the latest month for which figures are available—were £6,789 million in November, 1957. Advances in November totalled £2,146 million, compared with £2,096 million in October and £1,874 million in November, 1957.



BANK RATE ►

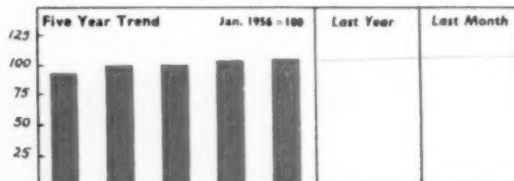
Further Bank Rate cuts may not be made in the near future. The Government may depend more on fiscal measures to stimulate the economy during the coming months. The most recent cut—from 4½ to 4 per cent—was made on November 20. The chart depicts changes over the last five years.



5. Trends in MARKET PRICES

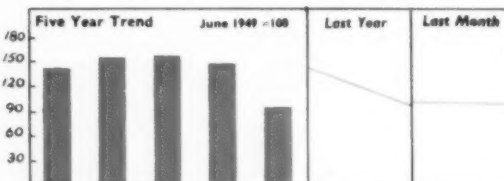
RETAIL PRICES ►

Retail prices have been rising recently, but only slightly. December index was 110.2, or 0.4 above November, 2.2 above a year earlier, and 15.2 points above four earlier. The rise in the index was due mainly to increases in the prices of coal, butter, ham and cheese. Prices for last three rose abnormally high.



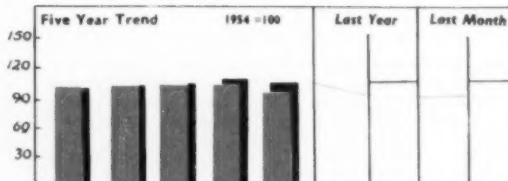
RAW MATERIAL PRICES ►

Raw material prices have fallen recently, following their modest rise. December provisional index was 92.6, compared with 94.0 in November, 93.1 in October, 144.1 in December, 1957, and 146.4 four years earlier. The fall was caused mainly by lower prices for copper, rubber and cotton.



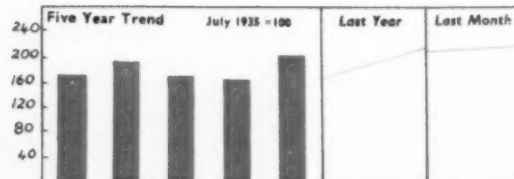
TERMS OF TRADE ►

Terms of trade have been slightly more favourable recently but this trend may be temporary. The latest import price index—for December—was 99, the same as November, but 1 point lower than a year earlier and 4 points lower than four years earlier. Export price index was 110—1 point higher than November, 1 point lower than a year earlier, and 10 points higher than four years earlier.



SHARE PRICES ►

Share prices have continued their rise, but more slowly. At the time of going to press the "Financial Times" index of industrial ordinary shares is around 220, or 4 points above the December average, 56 points above a year earlier, and 29 points above four years earlier. The rise will probably continue at a slower rate for a month or two.



Induction Heating - 2

The broad principles involved in the use of induction heating for melting and processing metals have already been dealt with in this series (Data Sheet No. 2). In order to make a critical examination of its possibilities, however, the potential user should be aware of certain technical factors which must influence his decisions.

Induction heating, of course, demands the use of alternating current which is available from the public supply at a frequency of 50 cycles per second. Higher frequencies, however, are desirable for certain applications and can be obtained by means of the appropriate conversion equipment. Frequencies can therefore be considered in three categories.

Mains Frequency
(direct from mains)—50 c.p.s.

Medium Frequency
(machine generator)—50–10,000 c.p.s.

High Frequency (electronic generator)
—up to about 2,000,000 c.p.s.

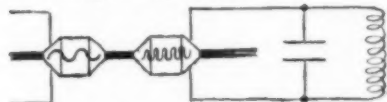
Mains Frequency

This needs no conversion equipment, it is particularly suitable for melting large pieces of scrap and, owing to the vigorous stirring forces produced, is excellent for alloy making. It has the merit of low initial cost compared with the high frequency method of melting, but is not so suitable for the production of high-grade steel. Mains frequency induction heating is also useful for stress-relieving of welds in pipes and vessels, heating of chemical vessels, pipelines, injection moulding machines and press platens.

A typical example of the use of mains frequency is the coreless induction melting furnace which can be connected direct to the public 3-phase supply. Such a furnace rated at 120 kW, with a holding capacity of 2,240 lb. will give a throughput of 5,000 lb. per hour of hot cupola metal superheated from 1,350°C to 1,450°C.

Medium Frequency

Motor generators ranging from 10 kW to 1,500 kW or more at frequencies up to about 10,000 c.p.s. are widely used for heating for forging, melting from 100 lb. to 10 tons, hardening, annealing, etc. A bank of capacitors maintains a high power factor during the heating cycle.



Another form of generator for frequencies of 1 to 2 kc.p.s. and powers around 250 kW, useful for forge heating and melting high temperature aircraft alloys, is a 6-anode steel tank mercury arc inverter.

High Frequency

Metal hardening and metallurgical processing are best handled by high frequency induction

(up to about 2,000,000 c.p.s.), particularly when a very thin case is required or when the section of the workpiece is too small to heat satisfactorily at medium frequency. These high frequencies are produced either by an electronic h.f. generator or a mercury-gap h.f. generator; high frequency induction can deal efficiently with such jobs as hardening lawnmower cylinders and cutters, bars and axle shafts.

The choice of frequency depends upon the metallurgical requirements and the size of the component to be treated. The following table gives the practical relationship between size and frequency, and may be used as a guide to the choice of generator, subject to metallurgical considerations.

Optimum Values

FREQUENCY C.P.S.	3,000	10,000	500,000	2,000,000
MIN. DEPTH OF HARDNESS POSSIBLE	.060 in.	.040 in.	.020 in.	.010 in.

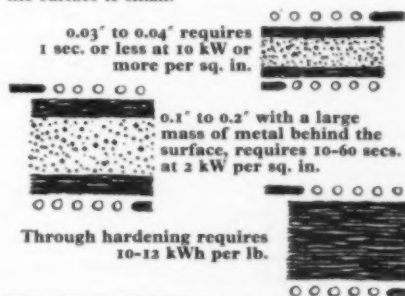
Practical Values

MIN. DEPTH OF HARDNESS EXPECTED	.150–.200 in.	.100–.150 in.	.030–.050 in.	.015–.030 in.
MIN. DIA. SURFACE HARDENING THIN CASE	2" & over	1" to 3"	1/2" to 2"	1/4" to 1/2"
MIN. DIA. SURFACE HARDENING DEEP CASE	2" & over	2" & over	1" & over	not suitable
MIN. DIA. THROUGH HARDENING	1" & over	1/2" to 2"	1/4" to 1/2"	not suitable.

These are of course very approximate since they also depend on metallurgical considerations.

Power required for H.F. Induction Hardening

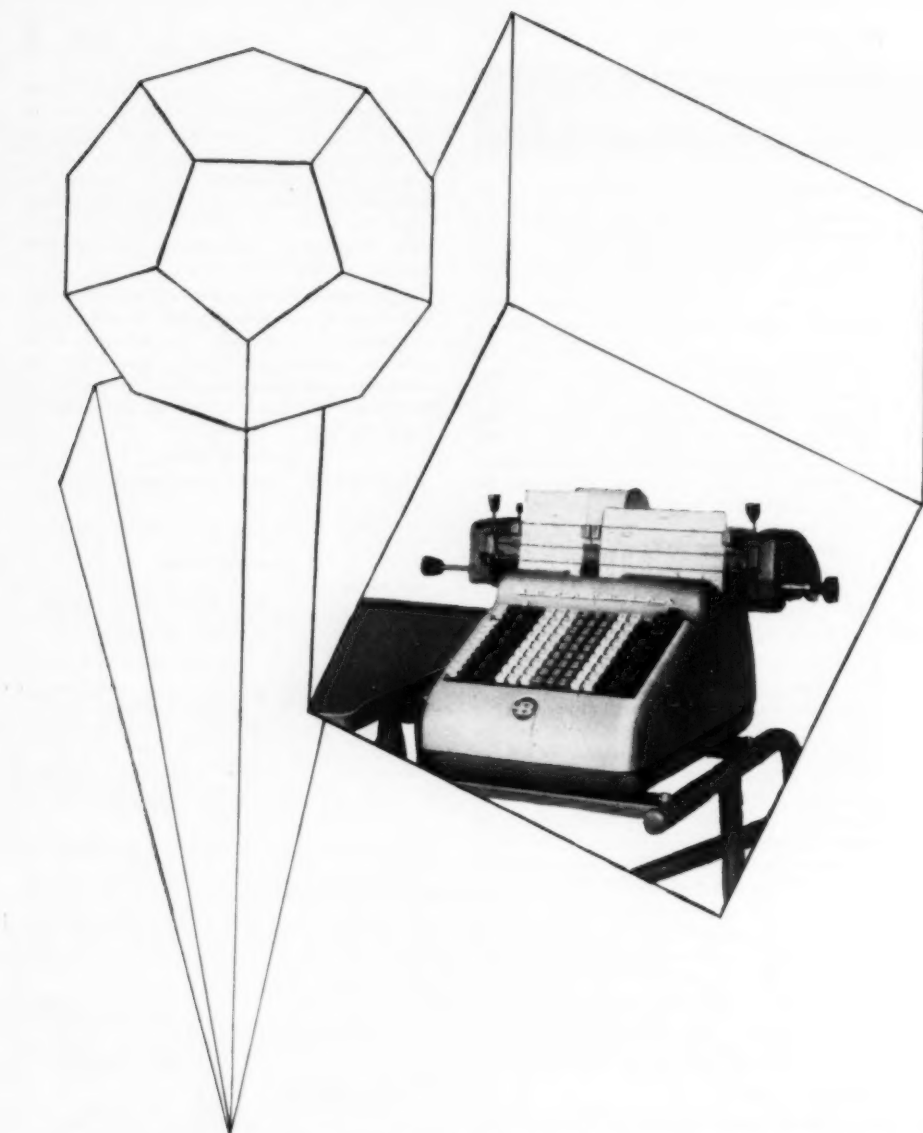
The high frequency power required per sq. in. of hardened surface depends upon the amount of metal behind the surface. Higher powers and shorter heating cycles are necessary for thin cases and when the thickness of metal behind the surface is small.



For further information, get in touch with your Electricity Board or write direct to the Electrical Development Association. Excellent reference books (8/6, or 9/- post free) are available on electricity and productivity—"Induction & Dielectric Heating" is an example.

E.D.A. also have available on free loan a series of films on the industrial use of electricity. Ask for a catalogue.

Issued by the Electrical Development Association, 2 Savoy Hill, London, W.C.2. 6515/2



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MARCH OF BUSINESS

Help us to help you

No merchandise is so good that it cannot be improved. No merchandiser is so wise that he cannot learn from his customers.

That is why **BUSINESS** is making a readership survey at a time when its circulation is climbing steadily.

The questionnaire on page 76 of this issue has been designed so that readers, simply by ticking the appropriate squares, can express positive opinions on **BUSINESS** features and methods of presentation. We sincerely hope that every one of our subscribers will cooperate.

The last full survey was made at the end of 1953. After analysis, the findings were promptly acted on. Since then, the A.B.C. circulation of **BUSINESS** has risen by more than 25 per cent.

Readers' replies will receive the same careful consideration this time.

We are confident that they will throw up some valuable material which will help us to improve still further both the magazine and its circulation.

BEE sets a new record

A record number of 135 firms will participate in this year's Business Efficiency Exhibition (Olympia, London, May 25 to June 4). Altogether, the exhibition will cover an area of more than 150,000 square feet.

BUSINESS is to publish a special supplementary issue describing the exhibition—and the £70 million-a-

year industry it represents—in mid-May. This, too, may prove to be a record-breaker. Copies will be sent free of charge to all current subscribers.

BPC outlines expansion plans

The British Productivity Council intends to extend its activities this year. At a recent meeting, the new chairman, Sir Miles Thomas, D.F.C., said that more would be done to foster the exchange of information between firms and to provide work study training. He added: "We are expansionists now. Let us see that the expansion takes place around the chest and not around the belly."

Soon the number of regional officers assisting local productivity committees will be increased from eight to 12. This will ease the load on voluntary workers.

Various subjects may be tackled in collaboration with professional bodies. Costing is one; planned

maintenance another. Collaboration with the British Institute of Management may lead to developments in the field of productivity measurement.

Sir Miles mentioned Lord Chandos's statement on the supreme importance of management-labour relations. He declared: "Our interest in this field is very great. Failures here jeopardize all other means of raising productivity."

Why suggestion schemes succeed

About 500 suggestion schemes are run by British firms. Nearly half of them are analysed in a new survey* by the Suggestion Schemes Group of the Industrial Welfare Society.

This includes a table of the '20 most successful schemes.' Success is measured by the number of suggestions received in one year for each 100 eligible employees. At the top is the National Cash Register Co. with a score of 151.8 (4,404 sug-

Next Month

What's New in Transport?

Big changes are coming in freight services. How will they affect you?

Executives' Offices

Picture story shows new space-saving, prestige-building ideas.

gestions from 2,900 employees). Then comes a small non-industrial unit, Bata Development Ltd., with 59 suggestions from 60 employees.

From the figures in this and other tables the Group have drawn an interesting and sometimes revealing picture of what makes a suggestion scheme tick. Samples:

—The most popular award systems are (1) 10 per cent of the first year's gross savings; (2) 10 per cent of the net savings; (3) 25 per cent of the net savings; and (4) 50 per cent of the net savings.

—Schemes without a definite award system are, on average, the least successful.

—Minimum awards range from 2s. 6d. to 5 gns. Surprisingly, the minimum tends to be higher in the less successful schemes.

—In most schemes there is no specified limit to awards. The highest award ever made in Britain was £1,100. The highest in 1957 (the year covered by the survey) were one of £750, two of £600 and several of £450.

—A few firms use non-monetary awards—usually National Savings certificates—although one gives an extra week's holiday for the best suggestion of the year. (Another gives a fortnight's holiday for two in France, in addition to the normal cash award.)

—Compared with the results of a 1955 survey, the number of suggestions received was up by 12 per cent; the number adopted up by 9 per cent; and the value of awards up by about 54 per cent.

* 'Successful Suggestion Schemes.' Industrial Welfare Society, 4s. 6d. net.

Shopkeepers in chains?

A controversial issue is to be raised at the B.I.M.'s 1959 Retail Management Conference: How independent retailers can fight competition and rising labour costs by banding together in 'voluntary chains.' This system is widespread on the Continent but has only recently come to Britain.

The theme of the conference

PEOPLE

PRODUCTS

PLACES 1



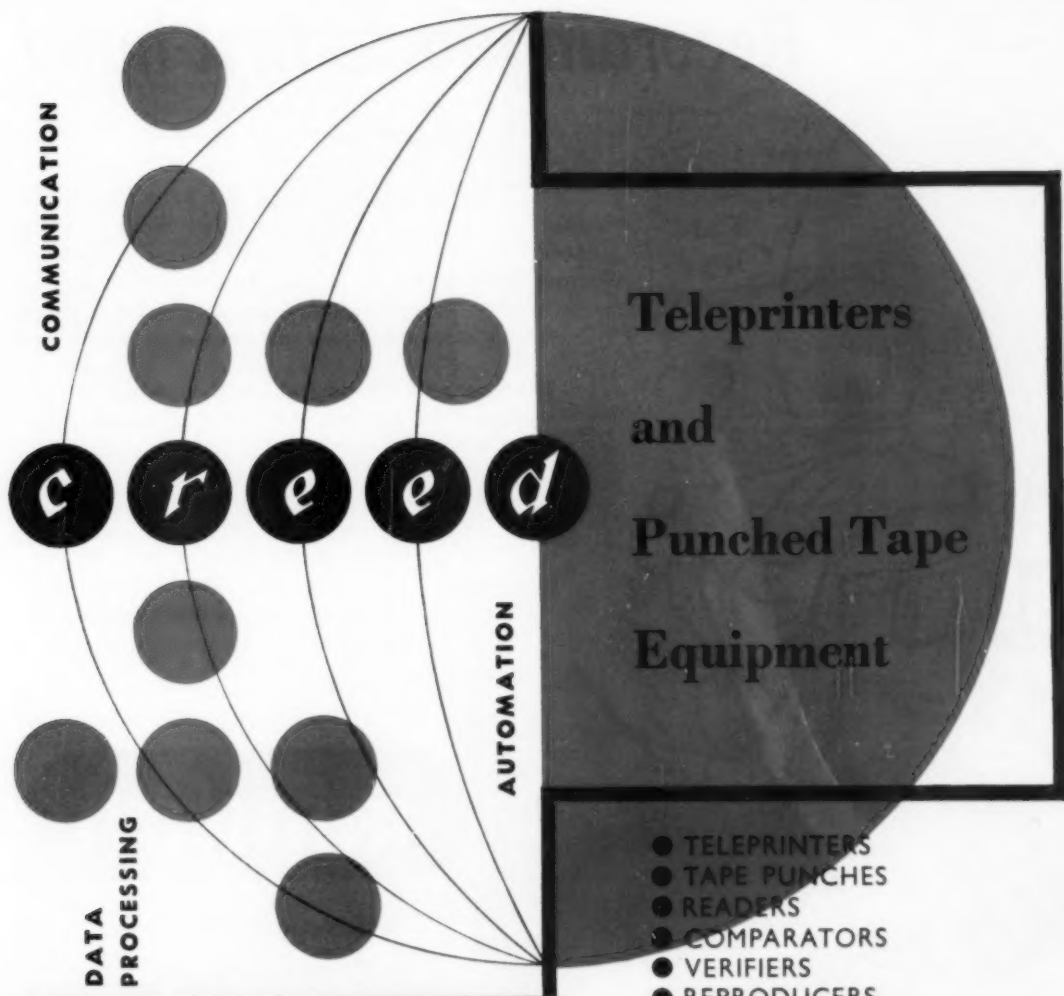
INDUSTRIAL savings expert Edward Jones takes over as publicity director of Unicorn Securities, managers of Unicorn Unit Trust. Aged 64, he received the C.B.E. for services to the National Savings Movement and has been secretary of the National Savings Committee for 12 years. He believes the work of unit trusts and national savings is complementary. Both appeal to the small investor.



COMPUTERS will soon move from laboratory and office into the factory. Babcock and Wilcox are investigating the possibilities of using this Ferranti all-transistor model to control boilers during start-up and close-down. Compact and rugged—and needing little or no maintenance—it calculates the alterations that have to be made to a process, then carries them out.



SIDE-LOADING of vans, extensive use of pallets, and fork-trucks with long reach. These explain why work is enormously speeded up in the Reading dispatch departments of Huntley and Palmer, biscuit makers. The van's special aluminium body, 30ft. by 8ft. wide, has seven compartments with roller doors. Each holds six pallets. Total capacity is 2,300 tins.



**Model 3000
Tape Punch**

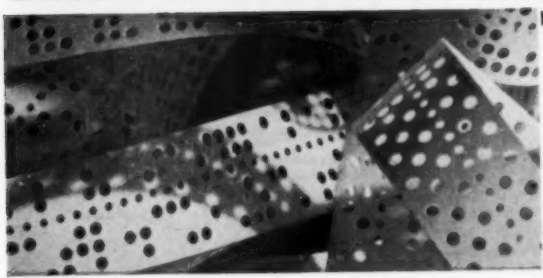
Records output of computers in 5-, 6-, 7- or 8-track punched tape at a new high speed of 300 characters per second.

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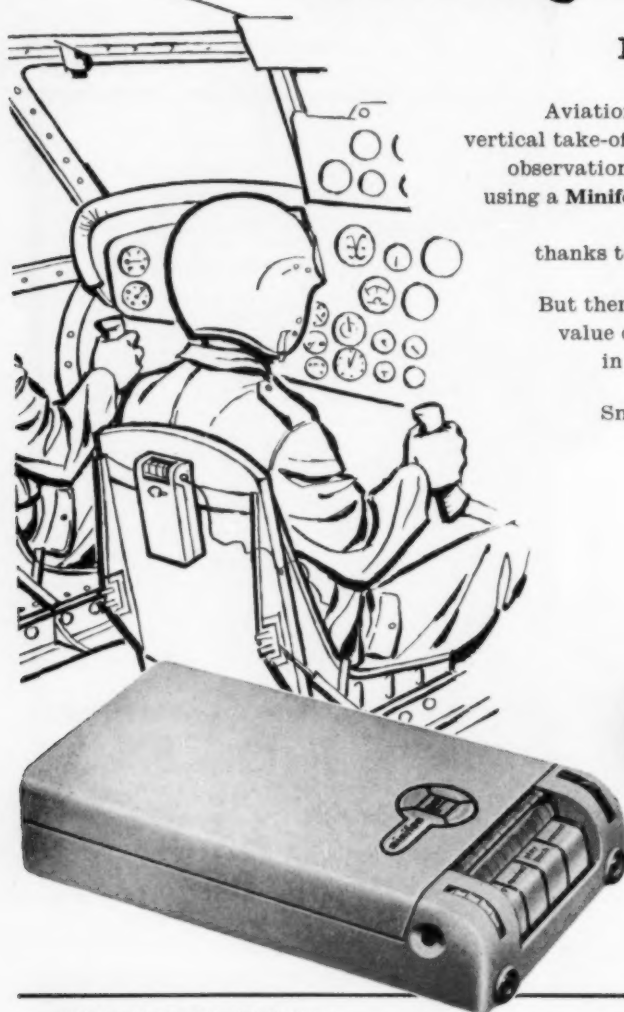
Recording facts first-hand

In the Air

Aviation experts testing the new Fairey Rotodyne vertical take-off airliner make an accurate record of their observations of the aircraft's performance in flight by using a **Minifon** pocket recorder. This is another typical example of the popularity of the Minifon, thanks to its robustness under exacting conditions.

But there's no need to go up in the air to prove the value of the **Minifon**. Use it *anywhere—any time—* in the office—outdoors—while travelling . . .

Small, light, battery-operated, easily carried in the pocket or briefcase, it is always ready to record facts, figures, conversations, minutes, reports—for transcription when convenient.



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DENMARK Copenhagen Christian Bruhn, Ankerborg, Vester Voldgade 83. Tel: Minerva 5010.	NORWAY Oslo Gustav A. Ring, Akersgata 8. Tel. 427050.	SWITZERLAND Basle Tangent A.G., Steinvorstadt 33. Tel. 061/235656.

Manufacturers: Protone GmbH • Hamburg • W. Germany

EM191

(Harrogate, March 10-12) is 'The Next Ten Years in Retailing.' According to the organizers, it will cover "those changes retail management should be making, or at least considering, today in order to survive and succeed tomorrow."

Papers will include 'Pricing for Profit' (in case resale price maintenance disappears from the food trades) and 'How to Reduce Labour Costs' (by using part-timers and introducing automation.)

New courses on financial control

Executives who wish to learn more about financial controls will welcome the introduction of a series of two-day appreciation courses by a new company called Management Courses Ltd.

The first, on February 10-11, deals with budgetary control; the second, on March 10-11, with such techniques as profitability ratios, break-even analysis and return on capital expenditure.

Both are being held in London. Details can be obtained from M.C.L. at 18 Hanover Street, W.1.

Investment in R & D

A recent D.S.I.R. report* throws light on the way in which British industry has been investing in scientific research and development. The figures, unfortunately, are for 1955; but at least they show how the total investment—in manpower and money—was distributed over different types of enterprise.

In 1955 private manufacturing industry employed the equivalent of 109,500 full-time workers on research and development. The total cost was £183 million.

Top investor was the aircraft industry—backed, obviously, by Government defence contracts. This accounted for 27.5 per cent of the manpower and 43 per cent of the expenditure (representing 30 per cent of the industry's net output).

Next came electrical engineering: 23.4 per cent of the manpower and 18.2 per cent of the expenditure

FEBRUARY, 1959

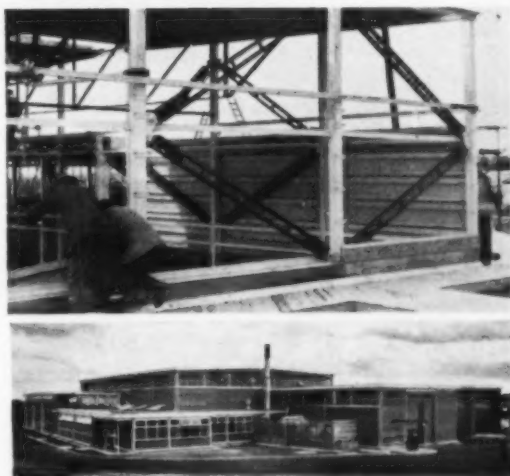
PEOPLE PRODUCTS PLACES 2



AIRLINE experience in 50 countries makes Charles Biondi the right man to sell a new idea. This is Aircraft Exchange, an organization to facilitate purchase of second-hand aircraft and put buyers in touch with suppliers of finance. A "shopping list" gives prices, which are expected now to even-up throughout the world.

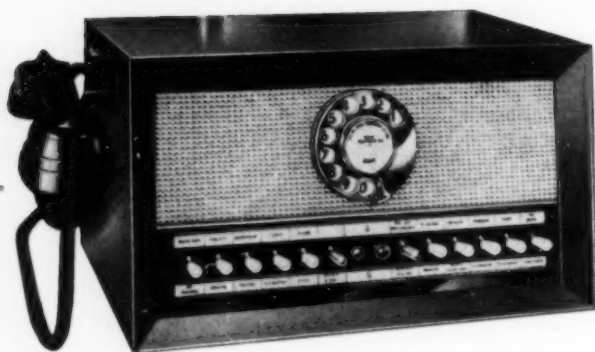


INSTRUMENT design may be improved thanks to an apparatus which measures the movements of operators' eyes as they scan instruments. It has been developed in the laboratories of E.M.I. Electronics over several years. Eye movements generate tiny voltages in the skin around the eyes. As the operator scans a screen, probes pick up these voltages which are amplified and used to project a moving spot of light on the screen. This shows exactly where the operator is looking at a given moment.



FISH-SCALES were the inspiration for the construction technique of a warehouse for W. & R. Jacob, at Mansfield, Notts. It is designed, like the factory described on page 26, to move as the ground subsides. Construction, by C.A.S. (Industrial Developments), took only five months.

The Reliance Loudspeaking Automatic Master Station especially designed for use by the busy executive.



sound sense ...

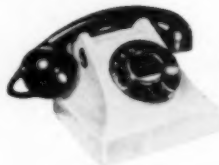
in any type of organisation means the fullest co-operation between staff and the co-ordination of effort. The Reliance Intercommunication Telephone Systems help to provide just that. They have long been established as an essential factor in business efficiency and many thousands of daily users are evidence of their value. Information is obtained, queries settled and even conferences held while all concerned remain at their desks—and the P.O. switchboard is free to deal with normal traffic. The choice of Reliance reflects sound sense—ensuring reliable efficiency



The Reliance push-button intercommunication set suitable for 3 to 21 stations.



The Microphone 'K' for wall mounting. In black, ivory, red and green bakelite.



Reliance '1000' telephone. The most recent design which harmonises with all modern schemes of decoration.

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(representing 6.8 per cent of the industry's net output).

The lowest-spending industries were leather (0.6 per cent of the net output), food, drink and tobacco (0.6 per cent), paper and printing (0.5 per cent), wood and cork (0.2 per cent) and clothing (0.1 per cent).

*Estimates of Resources Devoted to Scientific and Engineering Research and Development in British Manufacturing Industry, 1955. H.M.S.O., 3s. net.

Managers at Cambridge

Although British universities are often criticized for their apparent lack of interest (or faith) in management training, there are notable exceptions. One is the four-week summer course which has been held at Madingley Hall, Cambridge, since 1953.

This year's will run from June 29 to July 25. As usual, there are 40 places.

The course is designed for experienced managers under the age of 40.

Keeps executives in touch—always

When an executive leaves his office and climbs into his car, important decisions have often to be delayed until his return. A few, of course, put two-way radio in their cars but that represents a substantial capital investment.

Air Call, a new service operating within a 20-mile radius of London, undertakes to install two-way radio in cars. By this means messages telephoned to Air Call's headquarters are immediately relayed to the driver.

One monthly charge covers the cost of the service and the hire of the equipment.

Be Candid...

...when replying to the questionnaire on page 76. Your answers will help us to cater more specifically for YOUR information needs.

Unions Marking Time

PRODUCTION is expected to pick up about the middle of this year. Some observers are even forecasting a rise of 10 to 15 per cent over the next two years.

How will this affect unemployment? The National Institute of Economic and Social Research draws a parallel between the present economic situation and that of 1952. The subsequent recovery of 1953-54—with a 13½ per cent rise in production brought a 3 per cent rise in employment. Even allowing for increases in productivity, it is reasonable to expect a corresponding rise in employment this time.

Many union leaders are inclined to wait for this rise before pressing new wage claims. At the same time they realize that over-hasty action on their part might prejudice the Labour Party's election chances.

The only action the unions are likely to take until then will be to widen the campaign for a shorter working week. This would minimize redundancy and satisfy rank-and-file members temporarily.

Outstanding claims

The main demands still under negotiation or due for it soon are for building workers, railwaymen, civil servants, teachers, printers, cotton workers, local government officers, wool textile workers and electricity supply workers. Only two or three of these qualify as part of a new 1958-59 round of claims.

Of the rest, the claims by the civil servants, local government officers and teachers represent attempts to catch up with manual workers, since none of these black-coated workers had a general increase last year.

The railwaymen are waiting for their rates to be compared with those of other industries.

In April, a three-year period of stabilization ends for the printers.

The cotton workers are only discussing a new claim. Their last increase was in August 1957.

The electricity supply workers' claim seems doubtful. Last May they gained a 'productivity allowance' of 8s. 3d. a week, which did not increase overtime pay. Although this increase was ostensibly related to productivity (and hence was not inflationary) its effect on other settlements was the same as if it had been an ordinary increase.

Their union is now claiming a big increase to offset the subsequent rise in the cost of living. If successful, this claim could start off a new round, starting with the wool and building workers.

IDT's last gasp

The last weeks of the Industrial Disputes Tribunal—awaiting dissolution on February 28—have been pretty hectic. At the beginning of the year, more than 100 cases, some highly complex, were still in hand. To deal with them, the Ministry of Labour has had to split the I.D.T. into three divisions.

What next? Although the position is still obscure in many respects, it is safe to forecast that some form of legislation will take the place of the Industrial Disputes Order.

Its purpose will probably be to enforce agreed conditions of employment—not only concerned with wage rates—on all employers in industries not covered by Wages Council Acts and similar legislation.



CONTACT!

Has your production manager an urgent query?

— You can answer it while you are on the road.

Do you want that urgent quotation sent off?

— You can instruct your secretary while you are driving.

Do you want a van to make an urgent call?

— It can be arranged in minutes although they are all on the road.

With your cars and lorries fitted with Pye Radio Telephones you are in control.



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TA13

MANAGEMENT AT WORK

IDEAS AND ACTIONS OF PROGRESSIVE FIRMS

How salesmen waste their time

'TIME MANAGEMENT,' as a way of making a salesman's efforts more productive, could easily be dismissed as yet another slick phrase from America, expressing self-evident truths and platitudes in a new way.

That would be to miss valuable guidance. The phrase is used in a film, 'Solid Gold Hours,' produced by the **Dartnell Corporation**, Chicago, and shown recently at the Gaumont British film library, Perivale, Middlesex.

A salesman can sell only when face-to-face with a 'prospect,' but that represents only 36 per cent of his time. The rest is 'wasted' as follows: 23 per cent between interviews, travelling, unlucky calls; 23 per cent getting ready to sell, in waiting rooms, reading mail; and 18 per cent planning the day, finding leads, arranging samples, and so on.

The essential task is to increase the 36 per cent spent on selling and this is where a booklet issued to viewers helps.

1—Spend 30 more minutes each day in face-to-face selling. Time is found either by stretching working time or delegating items like paperwork.

2—Measure territories by the clock, not the map. Many problems of timing are the result of drawing areas too big.

3—Concentrate the effort. Ignore low-potential prospects and spend more time with more promising ones.

4—Simply make more time available for selling. For instance, is Saturday such a bad day as most make out? In the same way, reverse the tendency to 'write-off' rainy days and 'short' days.

Companies believe in 'advanced drivers'

HEAVY VEHICLES and their loads represent a substantial capital investment—in many cases £10,000 and more—so it is essential that they are out of service as seldom as possible.

British Petroleum encourage their drivers to take the utmost pride in their driving. One of the ways they do this is to give them time off to take the tests held by the Institute of Advanced Motorists, B.P. paying the fees.

A large number of the 10,000-odd drivers who have

passed the test are entered by their firms. Where a company pay the fees the institute gives a comprehensive report on the driver's capabilities. One firm with a former heavy accident rate now provides cars only to salesmen who have passed the test. Others encourage their men to pass the test by giving pay increases or other awards.

New packaging idea makes coal attractive

COAL FROM A closed van, in non-returnable 28lb. paper sacks, sounds revolutionary.

But competition from oil is making the coal industry reflect how coal can achieve some of oil's convenience and cleanliness. And part at least of the answer is paper sacks, long used for cement, fertilisers, seeds, and so on.

Several merchants are successfully experimenting with them, and one of the biggest is **Charringtons**, who use Medway paper sacks. If the idea catches on—as appears likely—it will be yet another instance of the package helping to sell the product.

This is how paper sacks will sell coal. First, the idea of cleanliness. No longer need a coal store be dirty. Secondly, convenience. When the housewife



Another case of the package helping to sell the product . . .



Unique direct mail—in more than one way. Unique because it used pigeon post. Unique also because it achieved 100 per cent response. Salesmen were able to make a personal contact in every case. (See story below.)

runs out of coal she can drive down to the order office and have a few sacks loaded in the car boot, much as she might collect a couple of gallons of paraffin. The sacks are light and clean enough to be kept in a box-room or cupboard. Even the coal hod could be thrown away, the sack remaining by the fireside. Thirdly, the weight delivered is checked simply by counting the sacks.

Direct mail—with 100 per cent response

PIGEON POST is not exactly new—but it was given a new and profitable twist last month.

Smith-Corona (Great Britain) sent a sales letter about their electric typewriters from their London office to several City businessmen. With it, they sent a box containing a homing pigeon. When the pigeons were released they returned to base. Then the salesman knew his letter had been received—and that the recipient would still probably be in his office. In every case he was able to make a personal contact, thanks to the novelty of the 'stunt.'

Prize draw cuts accidents 41 per cent

SIMPLE TRICK is cutting accidents at the Glenrothes, Fife, paper mills of **Tullis, Russell and Co.**

Lots are drawn for a prize provided by management—

JUST A TICK . . .

. . . on the reply-paid questionnaire on page 76 will give us valuable information on your reactions to **BUSINESS**. (A lot of ticks will be even more helpful, of course!)

but only employees from accident-free sections of the mills can take part. To some extent the dice is loaded because the power house must have 12 weeks free from accidents before they can take part; the two mills need only be accident-free for eight.

Employees are enthusiastic. Accidents are down 41 per cent on the previous year. Retired foremen return to give employees hints on accident prevention—and take part in the draw.

Teamwork the key in appliance design

DESIGN AWARDS ARE gratifying for the manufacturers who receive them, but rarely do they take into account selling prices. And only a product which sells is successful from a manufacturer's point of view.

When a new product is planned by the **General Electric Co.** special steps are taken to see that the views of every department concerned with its manufacture and sale are taken into account from the outset. Their Appliance Design Centre has a team representing five divisions: cost and information, technical design, appearance design, and planning engineer.

Cost and information collect estimates from the company's market research unit about the market as a whole. They also get from Sales an idea of the share of the market G.E.C. can expect. It is also this department's job to work out the cost of labour and raw materials contained in competitive products already on the market.

The technical design and mechanical design departments have laboratories and workshops where they try out their ideas and build prototypes.

Appearance design work out the optimum form, colour and style of the product. They also design boxes and packaging. They are the bridge between planners and customer.

Planning engineer section keep in touch with the factories. They prepare new machine layouts, or



SERVICES provide

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TIME RECORDERS

TR Services provide more than a range of equipment for doing different kinds of jobs. The really important thing about TR Services is their good effect on a business; on its economy, efficiency and on its whole atmosphere.

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The climate of business is altogether different in an organisation where TR Services give staff a proper appreciation of the value of their time, and provide the means to make the utmost use of it.

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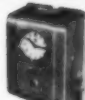
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person-to-person
selling...

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TACK Sales Training Courses give your salesmen and sales executives a new insight into selling—creating the vigour and enthusiasm that bring success.

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In only 3 days, the TACK Course gives the benefits of a lifetime's selling experience to every member of your sales force. Experienced salesmen are led to re-examine their techniques in the light of tomorrow's buying trends. Newcomers start their careers fully equipped and confident.

2-DAY COURSE in Sales Management

This refresher course provides new ideas and gives inspiration to all sales executives. And the unique TACK Management Advisory Service is available to them at any time thereafter, for free consultation and advice.

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PENS for Scripto Pens Ltd.
ELECTRONIC PRODUCTS for The Solartron Electronic Group Ltd.
BEDS for Horatio Myer & Co. Ltd.
AIR TRAVEL for British European Airways.
CLOCKS AND WATCHES for Smiths Clocks and Watches Ltd.
PAPER TOWELS for Kimberly-Clark Ltd.
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prepare capital expenditure estimates for board approval.

The Centre advises factory management. It never dictates. Managers are invited to visit the centre at any time to see progress on appliances they will be manufacturing.

Laundry washes out clocking in

CLOCKING IN is so firmly established as a reliable basis for wage and bonus payments that any employer who scraps it is gambling on the co-operation of his employees. And if he increases wages at the same time, the risk is even greater.

So **Spring Grove Laundries**, Isleworth, Middlesex, are pleased with their workers' reaction to a decision last year to abandon clocking-in. Output per employee has increased and staff turnover, a major worry in laundries, is now negligible.

One of the main reasons for the decision was the amount of office time consumed in checking clock cards and bonus sheets.

First step was to consolidate average bonus payments into the wages. To avoid arguments, wages were then increased by 10 per cent. Next, employees signed an agreement to work a set number of hours per week. Finally, only daily departures from the agreement are noted.

Supervisors note all lateness and overtime. At the end of the week lateness is subtracted from overtime and the standard wage varied accordingly. If the amount of work falls off due to holidays in customers' areas, employees are free to leave early, with no loss of wages.

Better letters—with a little thought

EVERY TYPIST—and many executives—are likely to learn something from *Typing Without Tears*, a

BUSINESS



**SAVE
£100**

**THE
ADDING
MACHINE**

SENSATION OF 1958

SWEEPING THE COUNTRY
WITH THE MOST
FANTASTIC SALES
SUCCESS THE
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KNOWN.



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model to
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Save £100 or more — Buy Adwel.

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booklet published by the **Provincial Insurance Co.,** Kendal.

The attitude of most companies is that their secretaries and typists have learned their jobs at school or secretarial college and need no further instruction or guidance. But no matter how competent they are they still need to know 'house rules.' And, as the dedication points out, all typists have the good name of their companies at their fingertips because everyone responds to a letter well typed, set out, and neatly folded.

The book begins by explaining how to sit at the typewriter and how to look after it. There is a warning about clichés and hints on how to improve spelling and vocabulary.

The Provincial seem to intend dictators to sign letters legibly because the example given omits a name although a designation is given. The practice of typing names after signatures appears to encourage illegible signatures. These indicate carelessness and a degree of contempt for the recipient. But where the signature is illegible and there is no typed name, much time is wasted deciphering it, checking with initials in the reference — and consulting anyone prepared to help.

Commando force for co-ordination

A **PRODUCTIVITY SERVICES** Department newly established by the **Solartron Electronic Group**, Thames Ditton, Surrey, is a sort of commando force for co-ordination. It will have ticklish problems to answer—problems that are often dodged in most organizations.

For instance, the new department will have to come to the rescue when a production project hangs fire; or estimate the group's labour needs in five or ten years; or plan an entire new section.

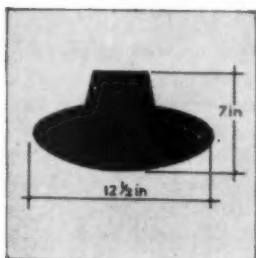
Add to these the 'ordinary' tasks of training new staff in the group's methods so that individuals as well as departments know exactly where they are going, and keeping the various branches of the group informed of what the others are doing.

Even that is not all. The department will provide productivity measurements to every company in the group, showing them how they compare not only with each other, but with the best comparable enterprises in the world.

The department itself is a symptom of the surging progress of Solartron—from 20 to more than 1,000 personnel in seven years.

Managers see where they fit in

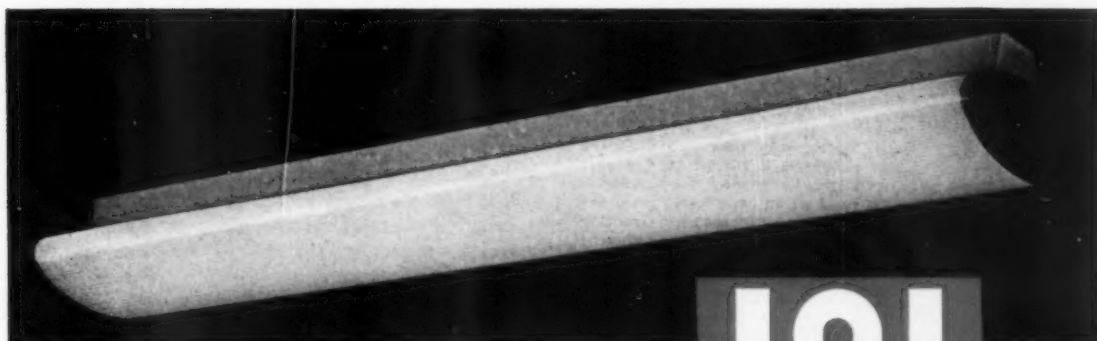
MEMBERS OF MIDDLE and junior management seldom get the chance to look at themselves and their company



one of many decorative designs

The brilliantly successful G.E.C. 101 range of fluorescent fittings offers a wide choice of designs for every lighting requirement—in executive offices, showrooms, shops and stores, as well as factory areas. They are made for 1½ to 8 ft. single or twin Osram guaranteed tubes, and all employ the famous G.E.C. Basic Channel with its proven advantages of versatility and economy in installation and maintenance.

The fitting illustrated F41124/5 consists of a standard channel with an enclosed diffuser in reeded 030 'Perspex' with black ends and polished brass trim.

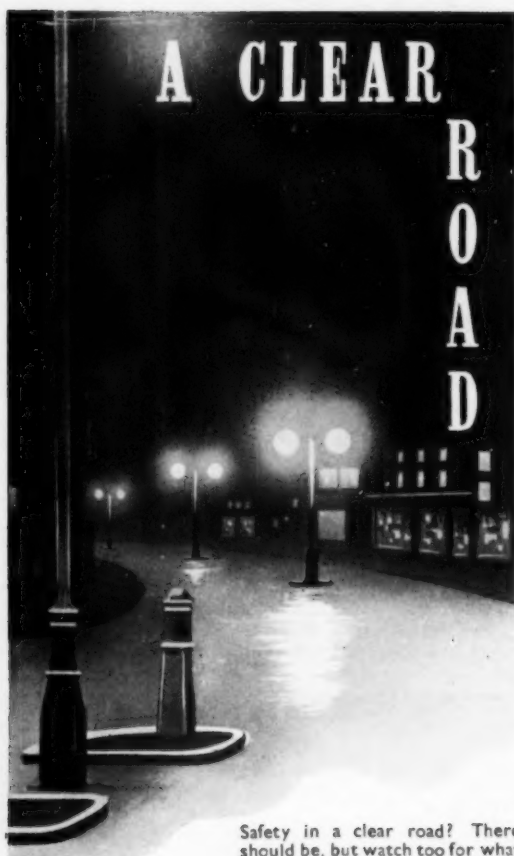


101
range

fluorescent lighting fittings



THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2



A CLEAR ROAD

WHEN IT'S A QUESTION OF CREDIT...

Safety in a clear road? There should be, but watch too for what might be around the corner—good vision helps here, as indeed it does in business today. Granting credit, for example, has awkward corners needing foresight to assess risks, often a worry without expert guidance. This is the function of Dun & Bradstreet, serving the business community by throwing light on commercial credit entitlement. If you are not using a Dun & Bradstreet Service we will be delighted to tell you how we help solve credit problems—many sales problems too!

. CREDIT STATUS
REPORTS
. CREDIT RATING
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Dun & Bradstreet Ltd.
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ADELAIDE HOUSE, LONDON BRIDGE, LONDON, E.C.4
Telephone: MANsion House 3255 (14 lines).

230 OFFICES IN PRINCIPAL WORLD MARKETS

26

in perspective to see just where they fit in. Most of the time they are too busy running an office or planning production schedules.

These were the staff to whom **Kayser Bondor** wanted to show the problems of management. So they took 30 of them from their five divisions to the management college at Sundridge Park, Bromley, Kent, for a three-day conference.

This differed from most such occasions in that it really was a conference. There were no long speeches about Kayser by the directors. There were no lectures on management principles. Instead every conference member received in advance a detailed explanation of the company's management structure, written by senior executives. By the time they reached Sundridge the delegates were ready to give their views.

Guided by college staff, they became so enthusiastic that they devoted their free evenings to further discussion. Divisional identities were forgotten: all ideas were expressed from a company point of view. Now each has a much better idea of his opposite number's problems.

This factory floats over subsidence

SUBSIDENCE WILL BE a big problem for many factories and offices where mines are being developed, especially in the Midlands and North.

But it is unlikely to present serious difficulties to **Rocol Ltd.**, manufacturers of special lubricants. They took future subsidence into account when they decided to build their new factory at Swillington, near Leeds.

It is built in six separate sections. Each 'floats' on a concrete sandwich with a filling of sand. When movement takes place the sand will help one concrete layer to slide over the other.

It is calculated that when subsidence occurs the general effect will be similar to that of a train passing over sleepers. The sleepers move, then spring back.

Redundancy—it pays to plan now

THE UNUSUAL PUBLICITY which the newspapers gave to the A.E.I. redundancy scheme showed two things—first that the papers were short of front page news; second, that redundancy is very much in the air.

The A.E.I. scheme itself contains nothing revolutionary. It was preceded and followed by other schemes—some more generous. For instance, **Triplex Safety Glass** and the Transport and General Workers' Union agreed on a scheme providing up to 12 weeks' notice for employees with 20 years' service.

The value of such schemes is enormous. Agreement can much more easily be reached when unions can bargain without feeling obliged to justify themselves to workers newly thrown on to the street.

END

BUSINESS

It's on the cards! They **PROVE** that for

UNRIVALLED

versatility

IN TIME

RECORDERS

you must choose



Only the Blick Range offers **ALL TYPES** on terms to suit **ALL POCKETS**, with service to satisfy thousands of users.

Time recording presents many complex problems, but the Blick Range is so flexible, versatile and adaptable that it can solve every one, whether your works or office is small, large—or vast.

That is why tens of thousands of Blick Time Recorders are in use all over the world. That is why it is well worth while getting in touch with Blick before you buy any kind of Time Recorder.

All Blick models are available on very attractive rental terms—for ten years, five years or short periods to suit individual requirements—or for outright purchase.

An enquiry now will bring you the answer—after careful study of your needs—to your problem, and will cost you nothing.



Model 51

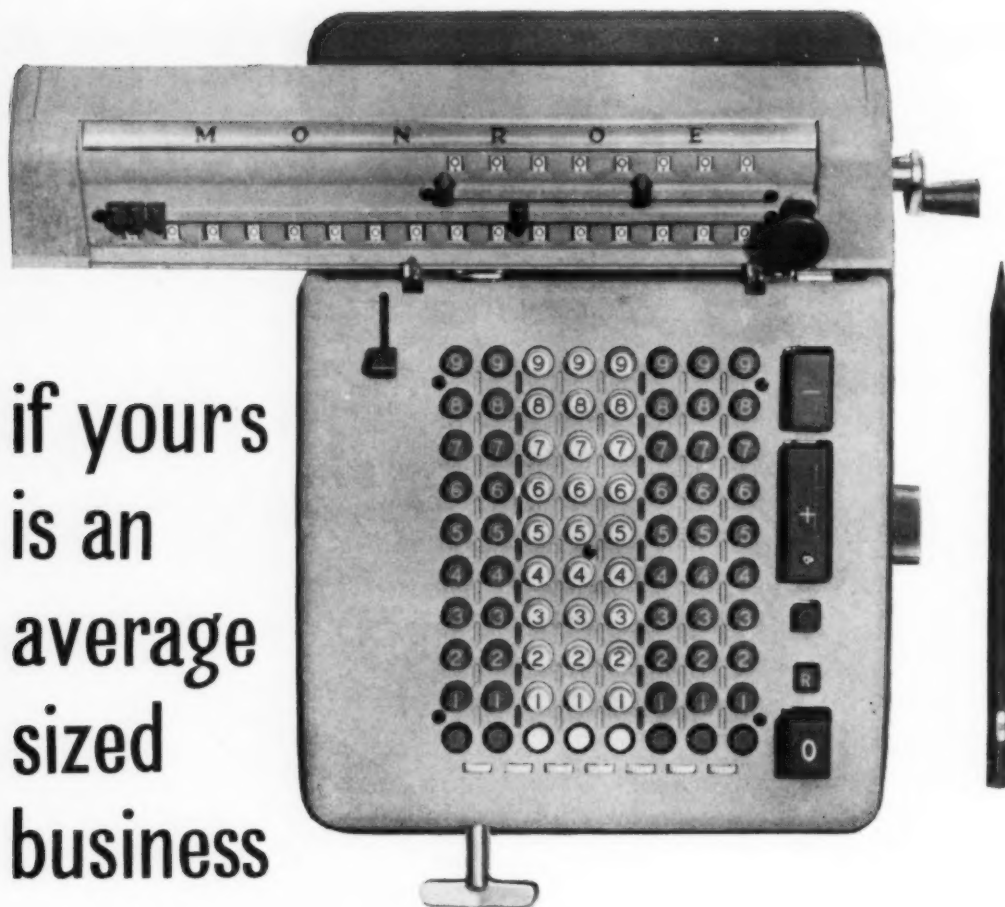
BLICK CARD-SYSTEM RECORDERS are ideal for clocking hourly-paid workers. They can be supplied in either wood or metal cases; electrical or mechanical; to print one or two colours—automatically or by depression of a handle; for set in-out times or to cope with overlapping in-out times.

BLICK TIME RECORDERS LTD

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Phone: MONARCH 6256

if yours
is an
average
sized
business



the chances are that a Monroe AP-all-purpose calculator will do all the figuring you require—quickly, accurately, economically. If not, well Monroe's long specialist experience will help you to make the shrewdest choice from their range of eighteen models—and Monroe's expert after-sales service will ensure that you get the very best out of your machine. Monroe Calculators range from the simple, hand-operated LN 160 to the Monroe Duplex 88N, the world's most advanced machine. Among the eighteen models in this comprehensive range is one that will undoubtedly suit *your* business and, what's more, *your* budget.

*For further particulars write,
or telephone:*
**Monroe Calculating Machine
Company Limited,
Bush House, London, W.C.2.
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the **MONROE**  calculator

Fast · Accurate · Dependable · Simple · Sturdy · Economical

More work need not mean more staff!



The PRIMUS man can show you why



That's all very well, but these office systems cost the earth to install.

This one doesn't. You can use it on all your existing typewriters, teleprinters and accounting and billing machines. There is no capital expenditure.

Won't my office be disrupted whilst my staff are learning to operate it?

Definitely not. Any typist can learn the Primus system in fifteen minutes.

My own system has been evolved to suit my special needs. I don't want it mutilated.

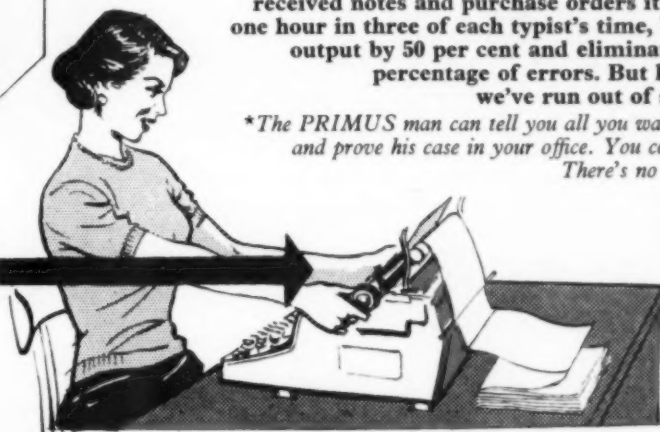
It won't be. The basic principle of Primus Continuous Stationery never varies, but at the same time it can be adapted to suit each individual user's needs perfectly. That's the beauty of it.

What saving will it show me?

On things like invoicing, works orders, goods received notes and purchase orders it will save one hour in three of each typist's time, boost her output by 50 per cent and eliminate a large percentage of errors. But look here, we've run out of space . . .

**The PRIMUS man can tell you all you want to know and prove his case in your office. You contact him. There's no obligation.*

IT'S AS SIMPLE AS THIS



PRIMUS

continuous stationery

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indivi dual ity!

Very few people have average figures, the human frame and shape differs in every individual. Theoretically, therefore, for true posture and the comfort that is essential for efficiency, the answer would seem to be a chair constructed in accordance with the anatomical dimensions of the user. The alternative . . . ?
A chair that is truly adjustable!

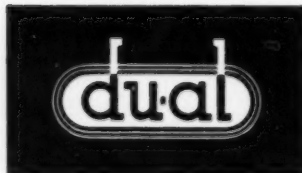
Here at last . . .

is an armchair that has everything. The double curved lumbar region supporting backrest is adjustable for height and angle and is spring loaded with tension control. The fully sprung seat can be raised or lowered with a new adjustment which allows free swivel movement yet stays at the desired seat height. All these features, and more, plus the wide range of *Du-al* upholstery materials and finishes ensure that here at last is a chair designed for individuality.

Du-al model J.28
Executive Swivel Posture Chair



*Du-al have the
answer to all
your seating problems*



tubular steel furniture

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BUSINESS



Spring

Lambs

Spring Cleaning

... NEW IDEAS

From all this we certainly get the thought that an overhaul or "spring cleaning" of accounts or recording methods is a good notion at this time of year.

"Such as . . . ?" A very fair question, sir, and here is one idea at least:—

ANALYSIS

- 1 Make "C/Fwd" totals unnecessary even on the widest analysis book.
- 2 Eliminate break-down analysis of invoices by laborious "exhaust" method. Get the same result in one-fifth of the time—without machines.
- 3 Get from a handful, up to hundreds of analysis headings, according to the problem. Hundreds more headings can be added later when required.
- 4 Most Nominal or Private Ledgers are helped by analysis forms to be introduced at any point.

Kalamazoo

ANALYSIS

KALAMAZOO LTD • NORTHFIELD • BIRMINGHAM 31

FEBRUARY, 1959

**TO KALAMAZOO LTD.,
NORTHFIELD, BIRMINGHAM 31.**

Please let me have details of your
Analysis methods without obligation

Name _____

Name of Company _____

Address _____

BU. 2/59

you can see

Addressall

advantages!

EASE OF OPERATION

Ease of operation is of the utmost importance to any office—and the Addressall range of machines have all been designed for operation by office staff, who usually take about $\frac{1}{4}$ of an hour to learn to use them. The system has been especially worked out on these lines, from typewritable stencils to automatic feed attachments for envelopes, labels and stationery, which speeds up operations.

The Addressall system for addressing, indexing and tabulating is one of the most efficient and least expensive on the market. The system is based on the Indexograph typewritable stencil, which is typed in your own office, light and easy to handle. There is a full range of machines, one of which is right for your business.

This new brochure explains why the Addressall System is the choice of so many large and small firms. Ask your secretary to send for YOUR COPY—it's free and places you under no obligation whatsoever.



Please send a copy of
"Addressall Advantages" to:

Name

Company

Address



Addressall

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Tel: HOLborn 1524/8 (5 lines)



A NEW DESK with A BIG TOP

For the executive who needs plenty of desk space, and who may hold meetings in his office, this is the ideal desk. The expansive top, 6' 10" x 46" overall, projects from the pedestals to provide kneespace on three sides.

Special features include glare-free working surface, touch operated flaps, gliding drawers and improved locking mechanism. Available in alternative heights. Stove enamelled in colours to tone with any decorative scheme.

HARVEY

400-STYLE

The Conference Desk is the latest addition to the Harvey '400-Style' Suite of office furniture in steel.

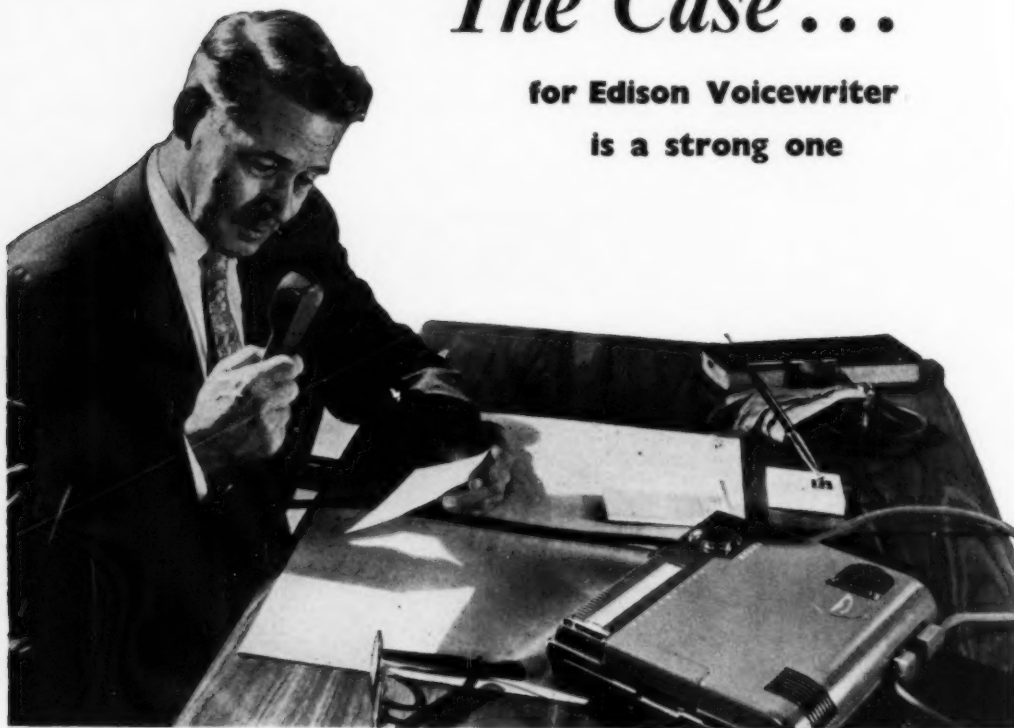
Conference
DESK

Please send for Brochure BU 999

G. A. HARVEY & CO. (LONDON) LTD., WOOLWICH ROAD, LONDON, S.E.7 · GREENWICH 3232 (22 lines)

The Case . . .

for Edison Voicewriter
is a strong one



The Edison V.P. VOICEWRITER

If we were to plead the case for Edison Voicewriter Dictation it would sound something like this:—

Whether you are in professional or commercial practice or no matter what your speciality may be . . . the Voicewriter can prove indispensable when you are in or out of the office. To catch up with correspondence, memoranda, briefs, contracts . . . dictate to your Voicewriter at your office or at home.

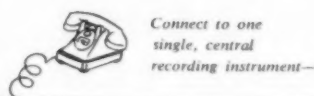
Then just give your Secretary the Edison Voicewriter Disc so that she can transcribe it whilst you are free for other work.

When you are dealing with complicated and lengthy reports or correspondence, the Voicewriter pauses whilst you order your thoughts, yet costs you nothing to keep it waiting.

Notes on interviews and conferences can be dictated whilst fresh in the mind.

Take your Voicewriter with you anywhere. It is equally efficient at home, on the road, in the office. No need to have a secretary on the spot when you wish to outline speeches, record minutes and meetings or keep up with paper work incurred by the many outside activities in which you must participate.

**AS AN ALTERNATIVE TO THE INDIVIDUAL V.P. VOICEWRITER INVESTIGATE
TELEVOICE REMOTE CONTROL DICTATION — FIRST INTRODUCED BY EDISON.**



WE SHALL BE PLEASED TO SEND PARTICULARS OF THESE SYSTEMS

Thomas A Edison
LIMITED

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SOUTHAMPTON ROW, LONDON W.C.1**
Telephone HOLborn 9988



The managing director waits without—

— without the copies of that letter he asked for about half an hour ago. To say he is angry is putting things mildly. Why, he asks, do I always have to wait? The most likely reason is that he has not yet looked into the question of using a "Thermo-Fax" Instant Dry-copier which produces accurate (no need for checking) copies in less time than it takes to stir a cup of tea. In one year a "Thermo-Fax" Dry-copier can save hundreds of pounds and much frustration. It is so simple to use that anyone — including the managing director — can take copies without preparation. There are no negatives, no chemicals, no liquids and no waiting. Copy-typing can now become a thing of the past.

It's time he inquired about

Thermo-Fax

REGD. TRADE MARK

"Secretary"

the instant dry-copier



Post to: COPYING PRODUCTS GROUP MINNESOTA MINING & MANUFACTURING CO. LTD.,

3M HOUSE, WIGMORE STREET, LONDON W.1 (HUNTER 5522).

Please send us further information about the THERMO-FAX "Secretary" Instant Dry-copier.

NAME OF FIRM _____ (ATTENTION OF) _____

ADDRESS _____



TMW 7262



"WE DIDN'T REALISE THE ADVANTAGES OF LIQUID FLOOR POLISH UNTIL WE USED SPOSS"

Most of the cost of floor polishing and preservation is the cost of the labour involved. We find that one man can do the work of three since we switched to Sposs Floor Dressings.

Costs cut *BY TWO THIRDS* with this MODERN LIQUID for all kinds of floors

WIDELY USED IN FACTORIES, OFFICES HOSPITALS, HOTELS, INSTITUTIONS, SHOWROOMS, BANKS, SCHOOLS, MUNICIPAL BUILDINGS and DEPARTMENT STORES

Yes! It's really economical. Being a liquid sposs spreads quickly and very thinly and is dry in 15 minutes. Then the lightest of polishing imparts a beautifully rich lustre to the floor. One gallon will cover up to two thousand square feet.

Non-slip finish. Danger of accident from slipping on highly polished floors is eliminated by the use of SPOSS.

Dirt-resisting, damp-resisting. The hard mirror-like SPOSS surface cannot absorb dust or dirt. SPOSS eliminates wet-scrubbing. Its remarkable resistance to water permits the floor to be cleaned with a damp cloth or mop ten to twelve times without impairing the brilliant finish.

Easy to maintain. Damp-mopping and occasional re-dressing keeps floors beautifully clean and lustrous.

For all floors: Wood, cork, lino, asphalt, thermoplastic tiles, rubber, composition, cement, terrazo etc. Available in colours.

In convenient size containers. SPOSS Floor Dressing is available in 1-gallon trial cans and in 5, 10 and 40-gallon drums.

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SPOSS *NON-SLIP* FLOOR DRESSINGS

YOU'D LIKE MORE INFORMATION? Ask your secretary to clip and post this coupon whilst the matter is fresh in your mind. Full details of SPOSS Floor Dressings will be sent in return. Write to us if you have any particular floor maintenance problems.


 to SPOSS PRODUCTS LTD 10 SOVEREIGN ST LEEDS
 Please send full details of SPOSS Floor Dressings
 NAME.....
 ADDRESS.....

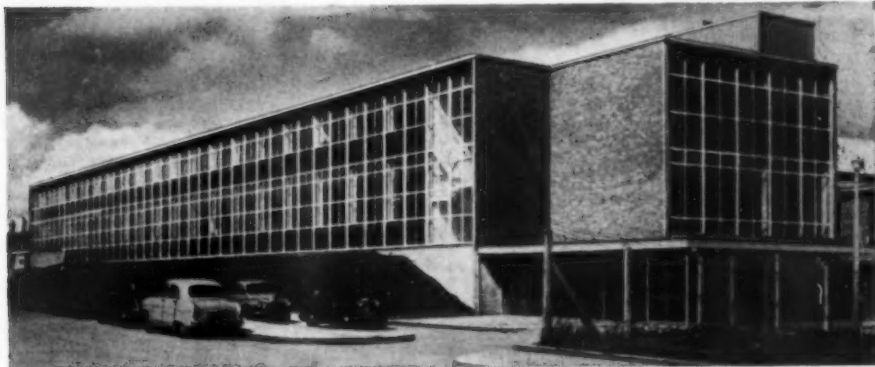
B/2/59

You can rent a NEW factory from 9^d PER SQUARE FOOT

THE new factory you want may be waiting for you now in Northern Ireland, where factories are being built throughout the year, ahead of demand, by the Ministry of Commerce. In the last thirteen years, 130 firms of all sizes have come to Northern Ireland for its undeniable economic advantages and the comprehensive Factory Building Service. This Service works in three ways. Manufacturers in a hurry can step into an *Advance Standard Factory*, already built and fully decorated, with north-light roofing, spacious office and canteen and storage accommodation, boiler-house, garage and an obstruction-free production area. Sizes range from 2,000 to 70,000 sq. feet. Every site has all services and space for at least 100% expansion. Alternatively, if a manufacturer prefers to have a *Standard Factory built-to-order* on a site of his own choosing, the Ministry of Commerce will offer a varied choice of sites and standard factories. Rents for standard factories of both types are from as little as 9d. per sq. foot per annum for the first ten years. They are then adjusted to current market value, probably from 1/3d. to 2/3d. per sq. foot. Where a manufacturer requires a *Special Factory*, the Ministry of Commerce will build the factory on a long term repayment basis. The size of site is virtually unlimited. The £4½ million AEI turbine generator works at Larne was built under this scheme.

UNDENIABLE ECONOMIC ADVANTAGES

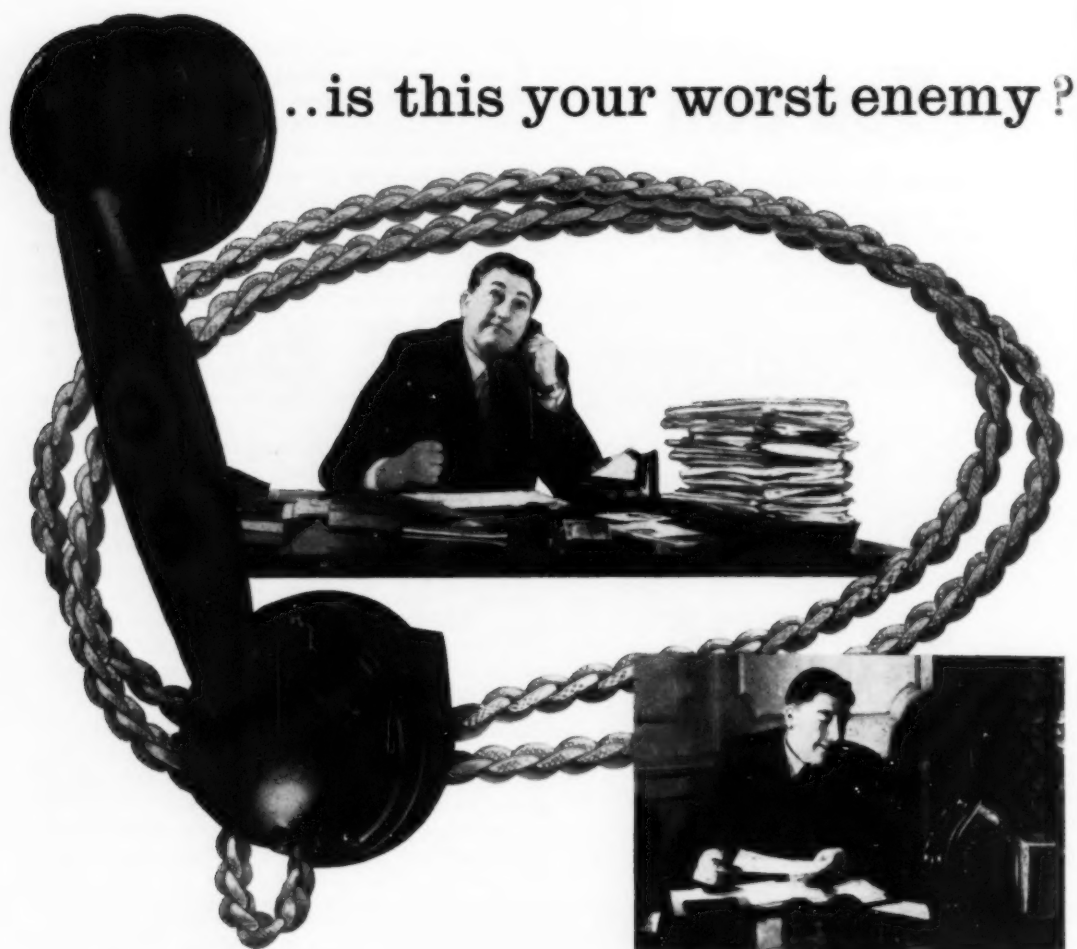
The Government of Northern Ireland can also offer 25% capital grants for new machinery, grants towards the cost of transferring equipment to the new factory, grants towards the cost of training and of building houses for key executives. There is plenty of adaptable labour and many firms work three shifts; labour turnover and absenteeism are low.



In nine years the British Tabulating Machine Company has quadrupled the size of its Belfast factory. This photograph shows one of two 104,000 sq. ft. extensions which together will bring the total factory area to nearly 500,000 sq. ft. The employment target is 2,500 workers. The Belfast factory is the largest of ten in the Hollerith Group of Companies.

For full details of factories available now, and of the Factory Building Service as a whole, write to DEPT B 2, NORTHERN IRELAND DEVELOPMENT COUNCIL (CHAIRMAN, THE VISCOUNT CHANDOS), 13 Lower Regent Street, London, S.W.1 (Tel.: WHItchall 0651) or: 99 Park Avenue (7th Floor), New York 16, N.Y., U.S.A. or, if you prefer, to: THE MINISTRY OF COMMERCE, BELFAST.





then make a friend of... FONADEK

You need to keep down your blood-pressure as well as that mounting pile of outstanding work. Wasting precious time hanging on to that telephone. You're a slave to the perishing thing! Why not put it in its place? Put it . . .!

Well, just put it on the FONADEK. You'll stay connected and if you're not on speaking terms for the time being you'll still be friends and free to deal with other things. And when you resume your conversation you need not even touch the telephone. You speak to the FONADEK and it speaks to you. What a timesaver! Why not send for full particulars today? Just write "FONADEK" on your letter-head; we will do the rest.



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BUSINESS

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Right now you probably know the exact state of the Stock Market as it affects your particular interests. Can you say the same about the current position in your business?

**watch
the
market**



on the tape . . .

Produc-trol visual wall charts keep tabs on every stage of any working programme, with day-to-day comparisons of performance with schedule. Produc-trol spotlights hold-ups remorselessly; nothing is concealed.

Produc-trol will give you an instantaneous visual picture of your programme and performance on Production, Sales, Budget, Order, Transport, Repair or Press Date schedules — its applications are infinite, but its message is constant: this is how you stand!

**watch
your
business**



**on
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visual control charts**



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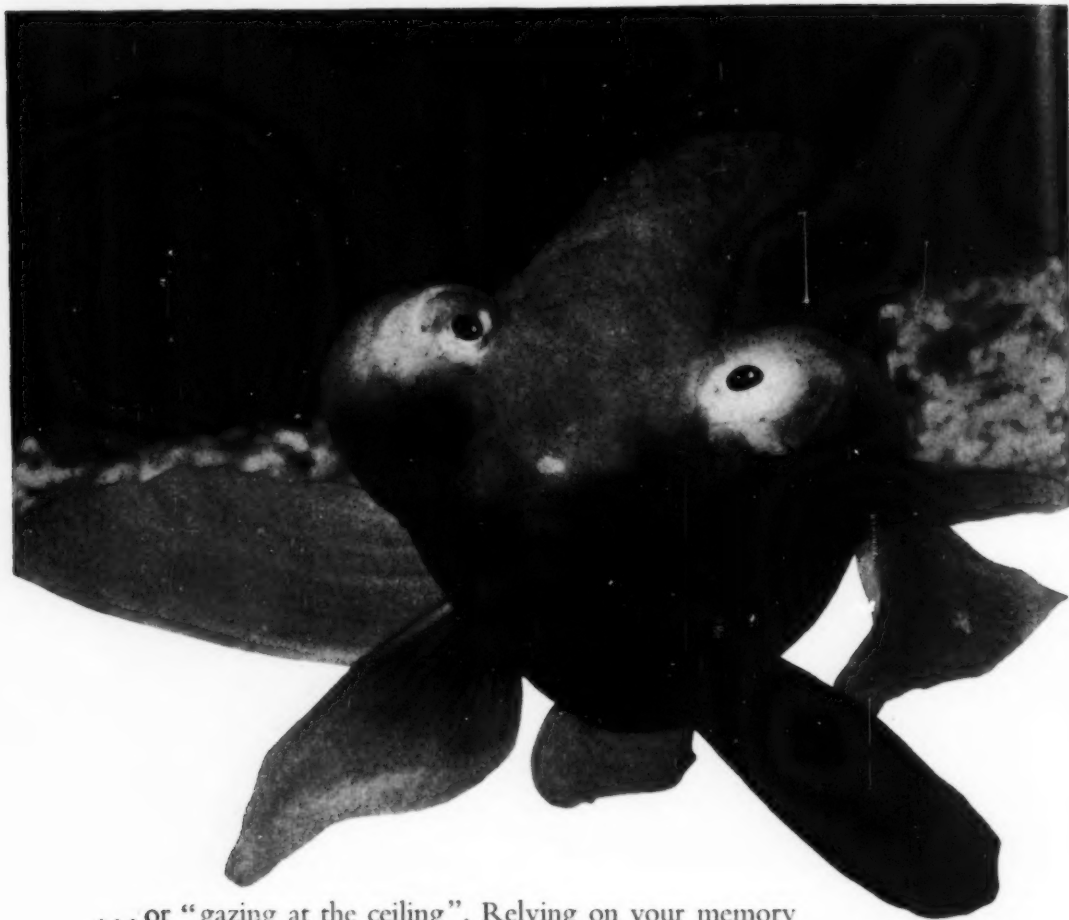
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* Looking heavenwards...



...or "gazing at the ceiling". Relying on your memory
for the answers to those awkward questions—how many
in stock—where were they printed—when can we
despatch—10,000 such questions can be answered
at a glance with a REDIREF by

Twinlock

REGD. TRADE MARK



IF IT'S A

PERCY JONES (*Twinlock*) LTD

37 CHANCERY LANE, LONDON, W.C.2.

Tel: CHAncery 8971

HEAD OFFICE & WORKS: ELMERS END, BECKENHAM, KENT

LOOSE LEAF BUSINESS SYSTEM—think of Twinlock



A Celestial Goldfish is so named
because its eyes are "looking
heavenwards".

BUSINESS

READY TO **TALK** BUSINESS?

...THE BAIRD **STENOCORD**



is your ever-present secretary, always ready when you are. It is extremely light in weight and easily portable in a handy travelling case.

Pick up the microphone — in the office, at home, or away in hotels — and you're talking business with the versatile Stenocord's single-button remote-control right under your thumb.

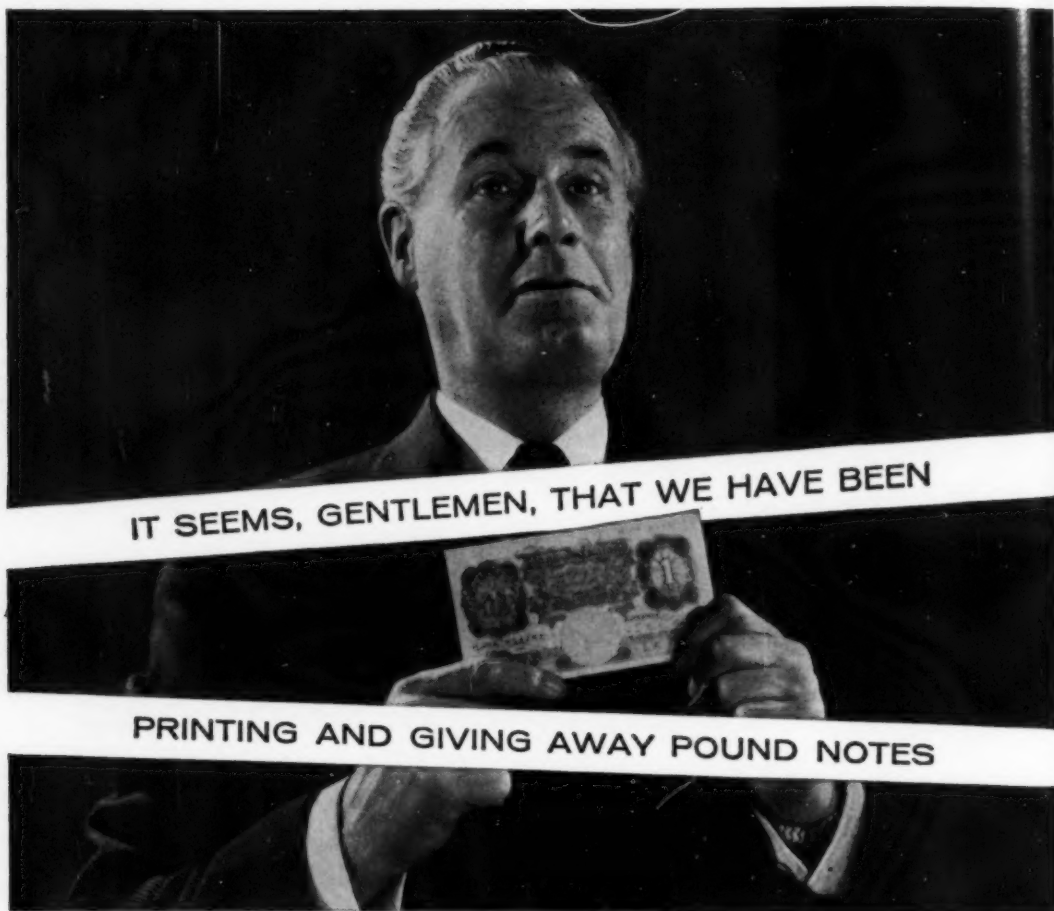
This dictating machine is new to the U.K. Its advanced design incorporates the highest quality components for long-life, faithful performance. The Stenocord's continuous recording belt obviates tapes and rewinds, carries up to twelve minutes of dictation and can be sent through the post in an ordinary envelope.

Worth thinking about? Our representatives will be glad to come and see you and demonstrate the Baird Stenocord.

BAIRD BUSINESS MACHINES LTD.,
39 DOVER ST., LONDON W.1.

STENOCORD

A Member of the Camp Bird Group of Industries



IT SEEMS, GENTLEMEN, THAT WE HAVE BEEN

PRINTING AND GIVING AWAY POUND NOTES

... using costly, out-of-date printing and duplicating methods is costing us hundreds, yearly !

Economy conscious business heads are thinking again about printing and duplicating. They're turning to xerography and making four figure savings—30% and more on printing costs... 80% and more on platemaking costs! Xerography—the revolutionary new printing process makes a master from original matter in five minutes for running on any offset litho duplicator—at a cost of ... 4d! Think what this means in time and cost... under your own roof you can run off thousands of copies in minutes from the word 'go', you can print many more of your own manuals, forms, documents and drawings...

print them sharply and clearly—just like the original.

Saving in cost and time over old duplicating methods is enormous

Your typists need no longer waste time typing stencils (or masters) and checking, (or in re-typing them when spoiled). Corrections are made by merely pasting in correction slips and making a new low-cost XeroX plate. More—as xerographic equipment can reduce copy size by a third or more, you can make 30% paper cost saving, alone!

Xerography a fast, dry, versatile

process requiring no chemicals, sensitised paper or dark room... easily operated by your existing staff after a few hours tuition.

Let us show you how xerography will benefit your particular organisation.

Ask your secretary to attach this coupon to your letterhead.

My Company is interested in how it can cut office printing, copying and duplicating costs through the new process of xerography. Further details, please.

Name _____
Position _____
Company Address _____

B/2/59



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You'll find Columbia Ribbons and Carbons
 wherever neat, clean and smudge-free letters are wanted;
 they always create the right impression. Columbia
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Factories in
 NEW YORK • CALIFORNIA • TORONTO
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 CA65

FEBRUARY, 1959



What are these men doing?



**They are having a
telephone conversation...**

With the new Ring-Master intercom there's no dialling or lifting of receivers—no need to stop what you're doing, in fact. The caller just presses the numbered buttons for the extension required. Conversation can be held quite normally at either end—even when the speaker is some way from the desk unit! And with the crystal-clear sound reproduction, voices can be recognised immediately.

The revolutionary Ring-Master system can bring *instant push-button contact* to your organisation, however small or large—from 2 to 999 extensions!

Ask for further details of the Ring-Master—telephone or write to one of the addresses below.

Extra facilities for visual paging, calling preference, public address and secretary interception can easily be added.

Ring-Master

**loudspeaker internal
telephone system**



E.M.I. SALES & SERVICE LTD HAYES MIDDLESEX Tel: SOUTHall 2468

London Sales Office: 363-367 Oxford Street, London, W.1. (GROsvenor 7127/8; MAYfair 8597).

North Region Sales Office: Regent House, Cannon Street, Manchester. (Deansgate 6043).

Birmingham Sales Office: City House, 111/117 John Bright Street, Birmingham, 1. (Midland 5821).

Scottish Sales Office: 135 Renfield Street, Glasgow, C.2. (Douglas 6061).

How to make MECHANISED ACCOUNTING your most profitable investment



Mechanised accounting is much more than a matter of buying machines. It should be a high-yielding investment. It must therefore be planned: made-to-measure to fit not only your present but your future needs. As an example of the kind of investment it will pay you to make, take the Remington Rand 'FOREMOST' Accounting Machine.

- Its 'simplest to operate' keyboard allows *unlimited accounting narration*.
- Its simple form feed ensures greater output, *and form designs can be easily amended to meet any new needs*.
- The totalling units are available in a great variety of styles (e.g.: sterling, decimal, weights and measures, hours and minutes).
Their capacity can always be expanded *to cope with increased work*.
Additional units can be fitted at any time *to extend the scope of the machine*.
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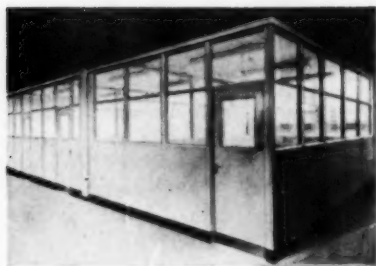
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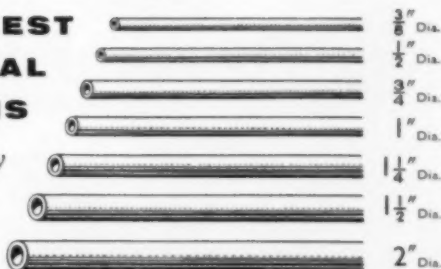
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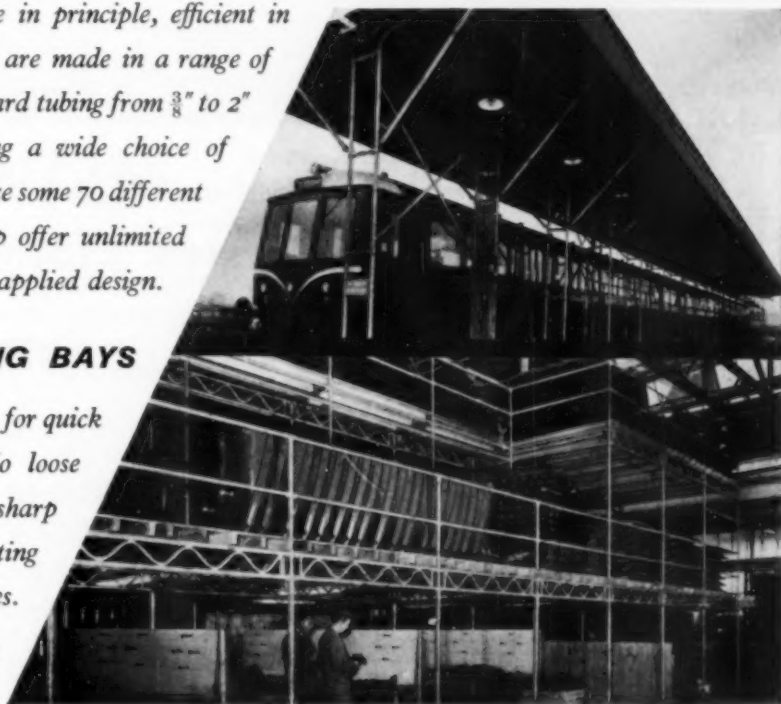
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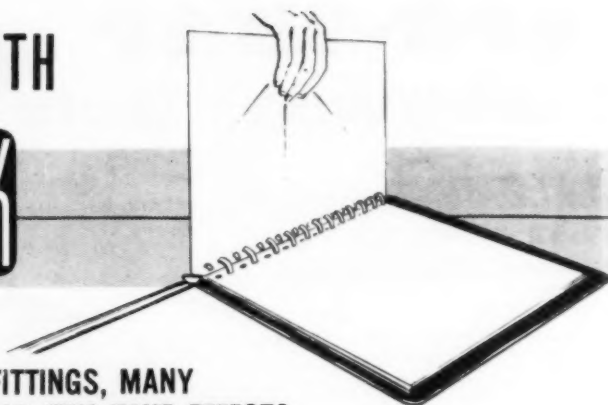
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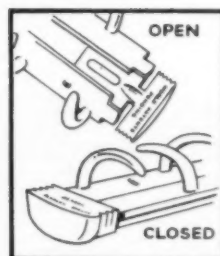
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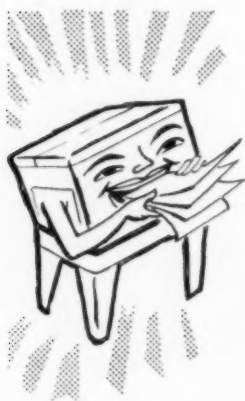
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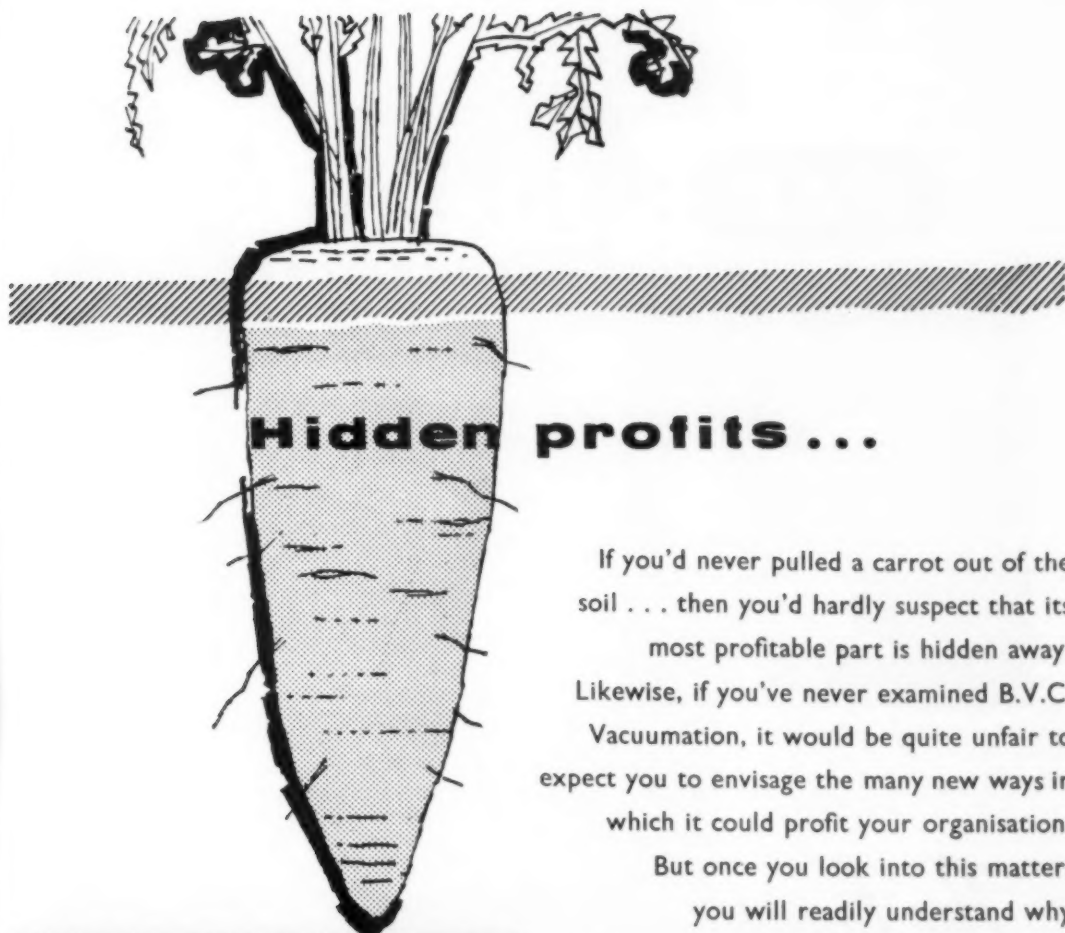
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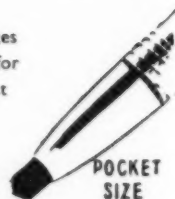
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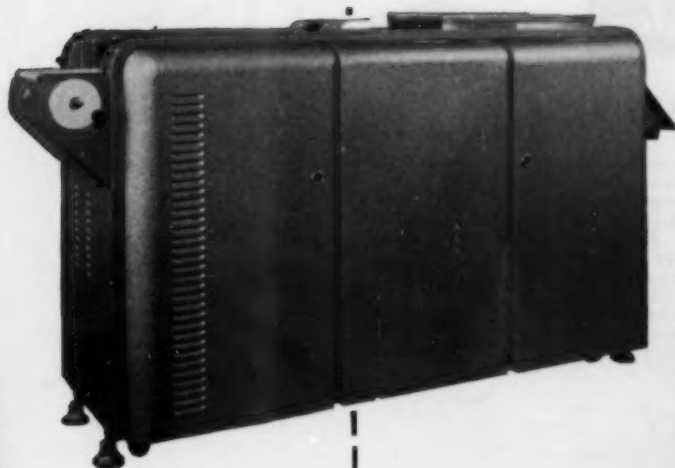
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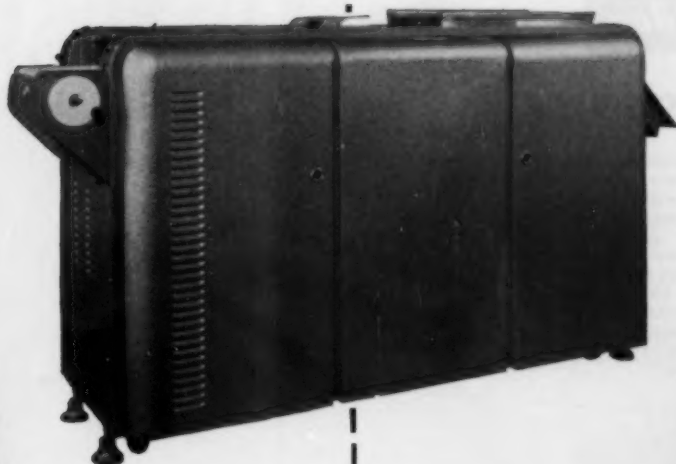


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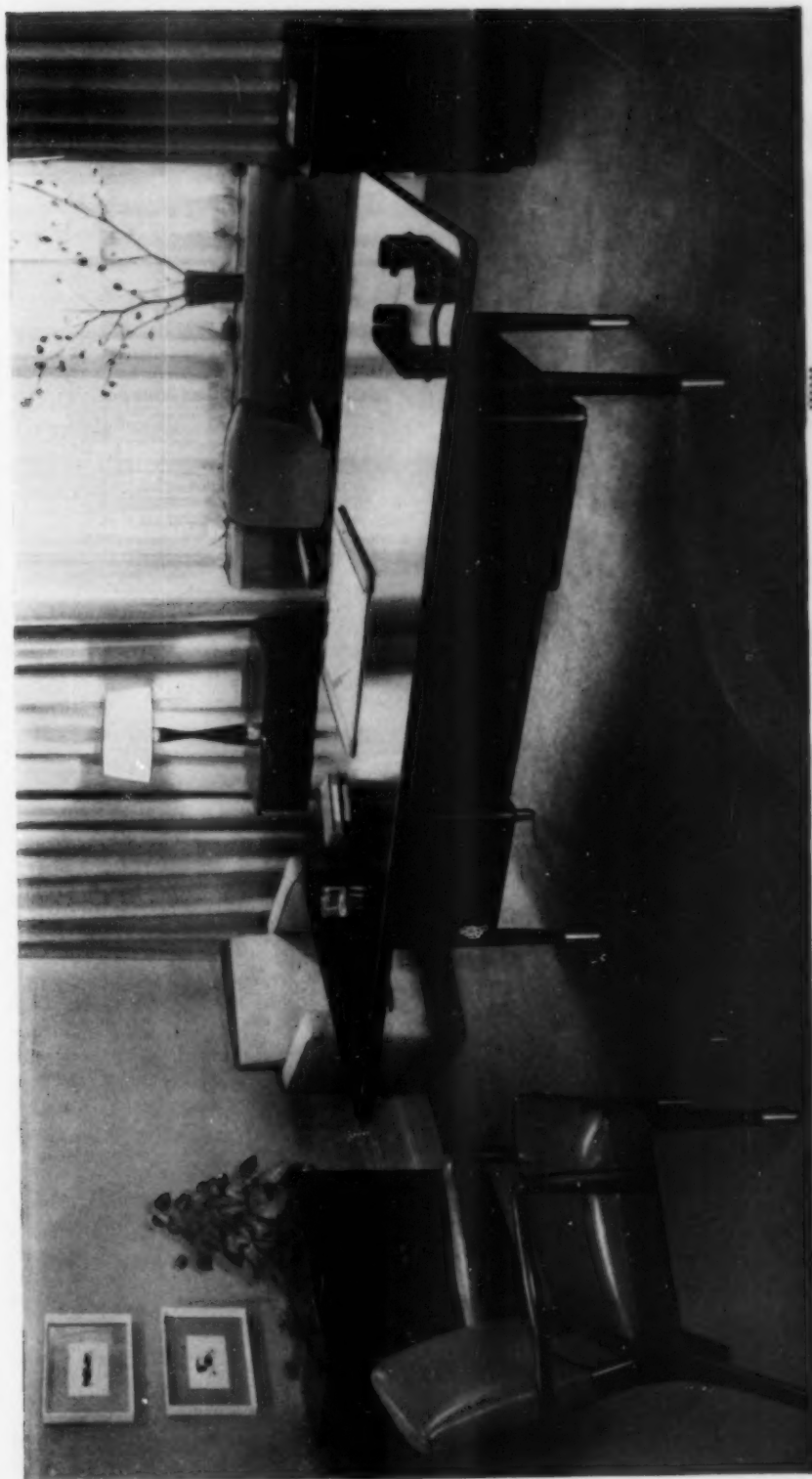


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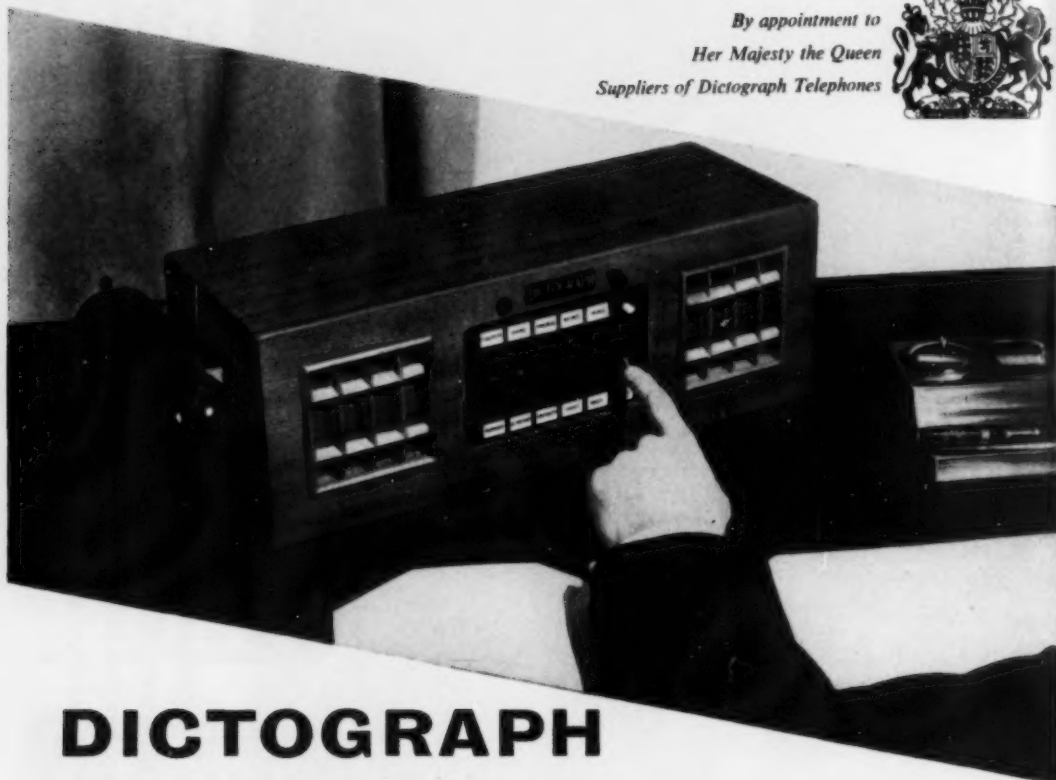
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I have been an executive with my company for more than 12 years, but any time now I expect to see my job advertised in the papers under the dreadful anonymity of one of the appointment agencies.

The reason for my fear is that most companies appear to be changing their executives for the sake of change. Surely that is the only explanation for the flood of advertisements. I realize that many firms are branching out into new fields and need new men to take charge—which is to be welcomed. But this is only a partial explanation.

No, I believe the existence of these agencies is changing the thinking of many companies. The agencies tap a wide market, get good candidates—and many companies feel obliged to replace their good men with better men. I sincerely hope I am wrong. Otherwise what is to happen to these displaced executives?

WORRIED EXECUTIVE.
Kingston, Surrey.

('Worried Executive' will find more precise information—if not consolation—in the special survey on the next page.—ED.)

Britain can supply

Sir,

I was very interested in the article "Powder Metal Parts are Better, Cheaper" in the December issue of *BUSINESS*.

FEBRUARY, 1959

The '600' group of companies are, I believe, the only manufacturers of iron powders in Britain, and I was naturally pleased to read such a clear and concise statement of the advantages of powder metallurgical processes — which have, strangely, made less progress here than in other highly industrialized countries.

However, I was perturbed to find that the author of the article is apparently aware only of *imported* iron powders, whereas a number of British manufacturers who use the process have, for some time now, been supplied with iron powders produced by us in the United Kingdom.

FELIX L. LEVY.
The George Cohen 600 Group Ltd.
London, W.12.

Better staff selection?

Sir,

Miss Clare Sloper has certainly struck the right key in her letter, "It would pay to study your secretary's job." (December issue, page 65.)

There are, however, many companies too small to employ a personnel officer. In these the selection of private secretaries and senior staff is often added to that already overburdened executive—the company secretary.

Although this agency exercises every care in selecting suitable candidates for our clients, many of the latter, wanting quick results, are known to us mainly by tele-

phone conversation. Thus our service has certain limitations in these cases where we lack full knowledge of the clients' conditions and type of business.

Although for secretarial and senior staff a full consulting service would be too lengthy and uneconomical, a brief personal visit to appraise the job, the tempo, and the atmosphere of the business would be a big step towards more accurate selection.

G. LUKE.
Wigmore Agencies Limited,
London, W.1.

Private tax consultants

Sir,

As an ex-Inspector tax consultant I enjoyed the article in your January issue and I should like to congratulate your contributor on his fair and well balanced presentation of the facts.

However, I am surprised at some of his remarks regarding fees. He mentions as little as one guinea an hour, which is what a firm of accountants would charge for junior audit clerks' time: no reputable consultant would work for that.

As to asking a back-duty consultant to quote a fee in advance, I can only suggest that if the consultant of your choice agreed to such a course you would know straight away that you had picked a man gravely lacking in judgment or experience. Apart from anything else the experienced back-duty consultant knows it is impossible to estimate the time he will have to waste in persuading his client to tell him the truth.

TAX CONSULTANT.
London, E.18.

**EXECUTIVE
JOB MARKET
—FIRST REPORT**

Hiring executives is like buying raw materials. To get the best men at the best prices you must study the market. In doing so you may also improve your own career prospects.

Executive job changes are becoming less haphazard. Science is being applied to the search and the selection. That is why the new appointment services are booming.

Here, for the first time, is a systematic analysis of the market. These surveys—to appear quarterly—are being prepared for BUSINESS by Charles Owen, joint managing director of Executive Appointments Ltd. His company is collecting and analysing the data in collaboration with Management Research Groups.

Executives on the Move

**Exclusive 'Business' survey of trends
in vacancies and appointments**

GOOD executives are hard to find. Is this true? It is said so often in conversation between employers that there must be something in it. But are they getting harder to find?

The spread of the situations vacant columns in some of our leading newspapers gives that impression. Is it true of executives in general or are certain types of appointment more difficult to fill than others? On the face of it, lavish advertisements offering high salaries are on the increase and this suggests growing competition for top executives. If more firms are looking outside for their key men does this mean that policies of promotion from within are losing favour? Is the recent advent of executive selection consultants a cause or an effect? Are executives for their own reasons more restless than they used to be and if so why?

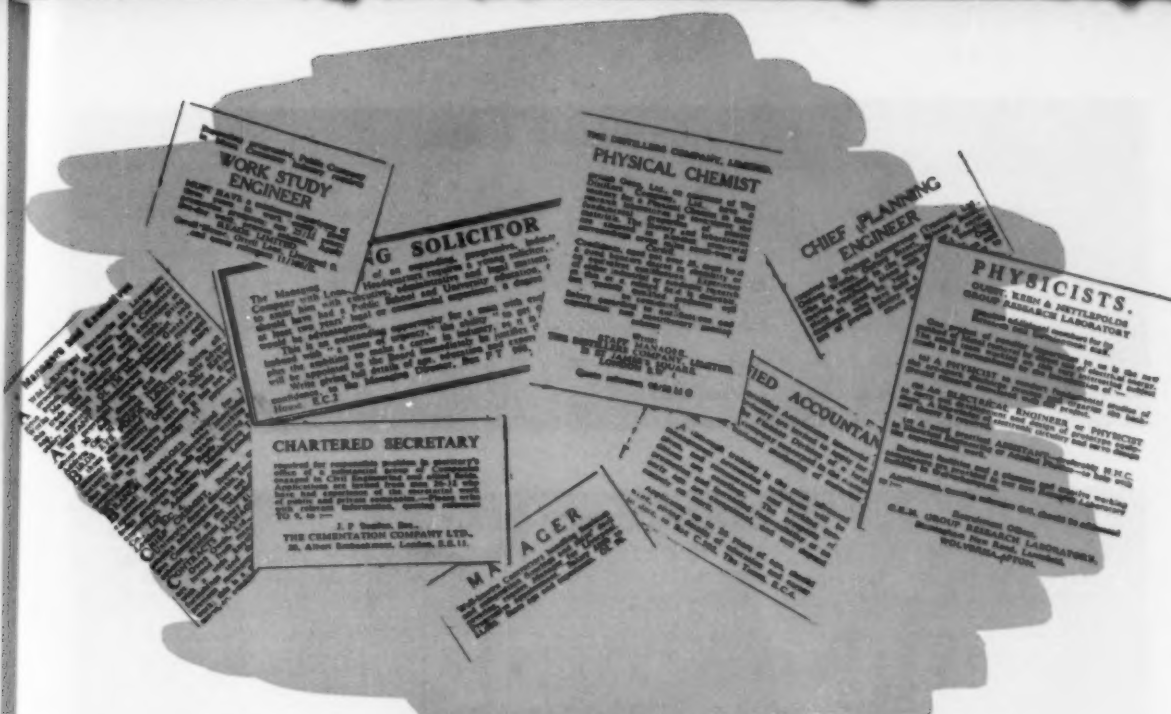
This article is the first in a quarterly series which will attempt to answer some of these questions. They deserve an answer for a number of reasons.

Excessive movement of executives is expensive. Shortage of executives hampers progress. Good men in

poor jobs are wasted. Poor men in good jobs are costly. We can all agree with these statements. We can agree also that their widespread application in industry and commerce would be bad for Britain—and bad, in many cases, for individual executives. A remedy, if needed, might not be easy to apply; but we should at least consider whether the problem is large enough to require a remedy at all. These articles will make available certain facts and it is hoped that in due course it will be possible to base judgments upon them.

The sources of information are threefold. In the first place, a systematic examination is being made of the appointments and situations vacant columns of three newspapers. These comprise a leading Sunday, a national daily and a well-known provincial newspaper. Each of the executive posts advertised in these media is classified under one of five job headings if applicable:

- 1—General management;
- 2—Production management and organization;
- 3—Sales and marketing;
- 4—Research, design and development;
- 5—Administration.



Each post is also given one of three ranks. To provide a common denominator, the examiner imagines the advertiser's successful candidate taking his place in a 'typical' manufacturing concern having 1,000 employees. Where would this man with his apparent qualifications and experience fit into that type of organization? In determining the answer, the examiner uses the broad ranking table shown on this page.

As this examination is concerned only with home executive appointments in industry and commerce the following are ignored:

- All posts advertised under official appointments.
- All appointments overseas.
- All posts offering a salary below £750.
- All weekly-paid posts.
- All professional appointments unless

wholly or primarily concerned with industry or commerce.

Thus a chartered accountant sought by a firm of accountants practising in the City of London is excluded, but a chartered accountant required as company secretary of an engineering company in Birmingham is included. In the latter case the post would be given Classification 5 (Administration) unless a seat on the board or high executive responsibility were specified, when it might be given Classification 1 (General management). If the employer, judging by the style of the advertisement, the salary offered and the qualifications sought, appeared to have, say, 500 employees, Rank B might be allocated; if a very small firm, Rank C; if a large organization, Rank A.

This example illustrates the care

that must be taken with advertisement analysis if the information obtained is to have any value. An examiner can learn with experience to read between an advertiser's lines, to apply a standard yardstick, to avoid duplications, and to deal consistently with borderline cases. After doing this job meticulously since the autumn of 1958, the examiner retained by Executive Appointments Ltd. can now claim these qualifications.

The second source of information is the experience of a small but representative sample of companies engaged in manufacturing industry. The sizes of these firms range from 6,000 to 600 employees; and their products embrace heavy, light and electrical engineering, chemicals and plastics, consumer goods and food.

Each firm is reporting quarterly (under a code letter) the number of executive appointments it has made during the previous three months, using the classification and rank systems described above. In these reports internal (from within) appointments are being distinguished from external (specially recruited from outside) appointments. Management Research Groups are respons-

Rank	Age	Position in firm	Salary
A	45 plus	Director General manager Chief executive	£3,000 plus
B	35 plus	Head of department Senior executive	£3,000-£1,750
C	25 plus	Manager or executive of middle or junior rank	£1,750-£750

Press Advertisement Analysis

Job Classification	1 General			2 Production			3 Sales			4 Research			5 Administration		
Rank	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Totals	26	53	29	6	106	451	11	81	160	4	64	609	10	54	174

Total number of advertisements classified: 1,838

Sample Company Survey

Job Classification	1 General			2 Production			3 Sales			4 Research			5 Administration		
Rank	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Internals	—	1	—	—	2	2	1	—	2	—	1	3	—	1	1
Externals	—	1	—	—	—	1	—	1	5	—	—	4	1	—	4
Totals	—	2	—	—	2	3	1	1	7	—	1	7	1	1	5

ible for this part of the operation.

The third source of information is the experience of Executive Appointments Ltd. This company, in the course of its work as executive search and selection consultants, handles on behalf of individual employers, a wide range of appointments within the salary bracket £4,000-£1,250. Moreover, a part of its natural function is to keep itself in touch with the various facets of the subject now under review. Confidential discussions with candidates for executive posts are an everyday feature of its work, and accordingly it is in an excellent position to discover why executives are on the move. Some of the impressions gained are now in process of analysis.

This opening report is based only on, figures for the last quarter of 1958; therefore the information so far obtained must be considered inconclusive. Later, definite trends may be discernible, and it may be

possible from a study of them to make certain deductions.

Meanwhile, the figures for the quarter ended December 31, 1958 are reproduced in the first table on this page.

It will be noted that the largest number at Rank A occur under Classification 1 (General management) and at Rank C under Classification 4 (Research, design and development.) A comparison of these figures with their neighbours might suggest that whereas the middle and junior ranks of general management are being filled largely by promotion from within, the top men in industry on one hand, and the young, highly-qualified engineers and chemists needed for research and experimental work on the other, are the categories at present in shortest supply.

Noteworthy, too, is the greater over-all effort to seek outside

candidates for production than for sales appointments.

To set alongside these figures, the second table shows an analysis of replies from the group of directly participating companies.

On this first occasion the figures available for this table are insufficient to provide a clearcut pattern. It is, however, of interest to note that appointments from within (14) are nearly equal in number to those made from external applicants (17), and that the great majority of the latter comprise posts of the lowest rank (C). A similar high over-all proportion of Rank C appointments is evident in our Press advertisement analysis but, apart from this, it would be unwise to make any other definite comparisons between the two tables at this stage. A clearer picture should emerge in the next report.

END

BUSINESS

Does This Manager Pay Tax on His Gold Watch?

Question. Rather than pay a cash bonus to one of our retiring managers my firm intend to present him with a gold watch. Would he have to pay tax on the value of this?

Answer. It is not considered that the watch would be taxable if the manager is not a director or earns no more than £2,000 per annum. Then it would be regarded as a pure gift, as contrasted with remuneration or a perquisite of employment.

But if he is a director, or earns more than £2,000 per annum, the cost of the watch would be taxable under a special rule in section 161 of the Income Tax Act, 1952.

Resolutions by the chairman

Question. We should be glad if you could advise us whether in limited companies' meetings the chairman can propose that a certain item be passed on the agenda;

alternatively, whether the chairman can second such an item. If such a proposal is made or seconded, can you please detail the wording which should be included in the minutes?

Answer. A chairman has power to propose a resolution or to second it. The minutes should read: "The Chairman proposed that . . .", or "The Chairman seconded the resolution."

Dispensing with 'Ltd.'

Question. My company, which carries on business as contractors and carriers, uses the word Limited (or an abbreviation) on letter headings, accounts, etc., as required by the Companies Act. I have been asked, however, whether it is necessary to use this on our vehicles also.

Answer. It is not necessary to display the full name of the company, including 'Ltd.' The latter can be omitted and even a mere abbreviation of the company's correct name could properly be painted on. The provisions of the Companies Act, 1948, regarding the use of a company's name do not apply to vehicles.

Controlled company's subsidiary

Question. I own half the shares in a small private company. This owns all the shares in a trading company, which is likely to accumulate a large proportion of its profits for some years. Do I understand your contributor to say

that because the trading company is a subsidiary, it is not a 'controlled' company?

Answer. No, not in this case. If your small private company is a controlled company (which seems likely) then the trading company is not technically a 'subsidiary' company for *surtax* purposes. Therefore it is a controlled company—if the other conditions are satisfied.

For these purposes, a company is not deemed to be a subsidiary if its control is in the hands of a controlled company. In other words, the position of the holding company must be considered.

Can a company hold its own shares

Question. Shares in a large private company were left in the shareholder's will to his son with the proviso that the executors should 'transfer the shares to the company' if the son should die first. He did pre-decease the shareholder. What happens to the shares now that the latter has died?

Answer. A company cannot hold its own shares since it cannot be a member of itself. It can, however, be a beneficiary of its own shares.

Therefore it should direct the executors to transfer the shares into the names of nominees. The nominees selected should be properly qualified under the company's articles of association to be registered shareholders. They will hold the shares on trust for the company. END

Good, but . . .

We think BUSINESS is good, but we know that it can be even better.

To make it better we need more precise information on the likes and dislikes of our 40,000 readers.

Please help by ticking yours on the reply-paid questionnaire on page 76.

BETTER BUYING

Key to major savings

by Terry Coram

BUSINESS is largely a matter of 'input-output.' Raw materials or components are bought; something is done to them; and finished goods are sold.

Much thought is given to ways of improving the processing and selling operation. By contrast, the 'input' side of these activities is sometimes neglected.

This is possibly due to the abnormal influences of the post-war seller's market. Buoyant demand and widespread shortages of supplies put the skilled buyer in the shade. But now, with increasing competition and decreasing profit margins, there are signs of a change in management's attitude towards the purchasing function.

Purchasing may be carried out by one man, by a department, or by several departments spread over the whole country. The size of the firm is the main criterion. In a small firm, the buyer may have many other functions. Some large firms deal in a narrow range of goods, and their purchasing outlay, though huge, is handled by one buyer with a small staff. In other cases, a relatively small outlay goes on a wide variety

of material, which calls for a number of specialist buyers. But whether the name-plate on the door reads Chief Buyer, Purchasing Officer, Procurement Agent—or even if there is no name-plate at all—someone in every firm has to look after the buying.

In one sense at least the buyer's job comes first. You buy, then you sell. Cost of materials and components can represent up to 60 per cent or more of the final cost of the article. Mistakes, therefore, are costly. Buying too much means expensive storage, and there is also the risk of losses through falling

prices. Buying too little may mean short-time working or even a shut-down through lack of materials.

Shrewd buying can produce big returns—and the gain is net. Saving £1,000 on a purchasing deal is probably the equivalent of something like £10,000 worth of extra sales—and usually involves less physical and financial effort.

An eye on world commodity prices and sources of supply tells an experienced buyer *when* to buy. If the price of a commodity is falling, he purchases small amounts. With a rising price, he 'buys-big,' compromising between the economy of



To get the best results, the executive in charge of purchasing must have a clear idea of production needs—present and future

taking large amounts and the cost of storing them.

He seeks the most favourable commercial terms. This does not necessarily mean the lowest prices. Other terms in the contract which he negotiates (concerning, for example, transport or after-sales service) often make the deal a big long-term money-saver.

Over the years the buyer becomes a skilled negotiator. Experience gives him a valuable knowledge of contract law and custom to match the considerable ability of the specialist salesmen with whom he deals.

Clearly the purchasing officer should—now and in the future—have an overall picture of his company's production requirements.

Combined with his knowledge of commodity markets, this may enable him to make useful suggestions regarding standardization of parts, substitution of one material for another, etc.

Purchasing policies

Purchasing programmes must be adapted to the type of firm for which the buying is done. For example, a

firm engaged in a continuous process needs a continuous flow of the right materials. In some chemical and plastics industries, even a very brief shutdown means a complete cleaning and overhauling for pipe and valve systems. With mechanical breakdowns, this may be unavoidable; but there is no excuse for it being brought about by lack of materials.

In certain industries where periods of peak activity alternate with periods of relative idleness, the buying programme must be synchronized with this 'cycle.' Otherwise, surpluses of materials or finished goods at the

To maintain efficient purchasing

Purchasing officers have their own association, formed in 1931. Its main object is to maintain 'efficient purchasing in industrial and public undertakings and to safeguard the professional status of purchasing officers.'

Members and students now total more than 4,700. At present, purchasing officers over 35 can join without passing an examination, but this exemption will end within the next few years.

The P.O.A. organizes courses and lectures. A feature of its annual conference is a 'Minibition' where sales representatives and buyers get together informally.

The medal shown here is awarded for 'services to purchasing.'

end of one season may have to be stored until the next.

With style or fashion industries, purchasing must be extremely flexible. The danger of obsolescence is high, and the buyers, like all other departments, must be on their toes to accommodate rapid changes in demand.

These are some of the many factors which influence individual purchasing policies. Whatever the programme, the buyer's sphere of interest must be clearly defined. Conflict between his and the production manager's aims should not be allowed beyond normal healthy limits.

Responsibilities

The production manager is concerned with turning out sufficient goods of the right quality at the right time. His outlook is not governed by the same commercial considerations as the buyer's. He wants large safety margins in both quantity and quality. The buyer on the other hand, may want to cut stocks wherever possible. To him, these represent only space, personnel and money—all tied up in an idle, deteriorating asset.

One purchasing officer estimates that storage costs his company 20 per cent of the annual value of the stock. This figure excludes rent of storage space because they own their warehouses. It also excludes the 'opportunity cost' of the money tied up. Over and above the interest rate lost (say 5 per cent) is the knowledge that the healthy company could make 10 per cent on this capital if it were otherwise employed.

Having decided what he wants and when he wants it, the production man's authority normally ends. It is then the buyer's job to see that goods of the correct specifications are made available to the workshops as they are needed.

Here is how one medium-large firm defines the responsibilities of its purchasing department.

1—The purchase of all raw, semi-finished and finished material and parts, equipment and supplies

necessary for the efficient conduct of the company's business. In the case of most process raw materials, the responsibility for specification, quantities, grades and acceptance or rejection lies with the using department through the purchasing department. Subject to this proviso, the work of the department includes negotiation of prices, settlement of terms, discounts and rebates, acceptance or rejection of goods (in collaboration with user-departments) issue of purchase orders and contracts and maintenance of efficient purchasing records.

2—The efficient control of works stores including: receiving, checking quantity and quality, coding stocks, issues, care and cleanliness of stores buildings and stocks, value and quantity records, stocktaking, eliminating obsolete and redundant stocks, preparing and maintaining stores catalogue.

3—The certification for payment of all purchase invoices, checking of allowances and credits.

4—Checking that purchases are made only on proper authority.

Case history 1

A larger firm, parent of a group, defines the responsibilities of its buying controller more briefly:

—Making and administering group contracts.

—Implementation of overall group buying policy.

—Maintenance of buying discipline—observance of proper channels, authority of requisitions etc.

—Application of approved economy standards.

This group employs some 12,000 people in seven main member-firms in Britain. The enormous range of goods handled by their buying departments includes electrical equipment, chemicals, rubber, petrol, oils, metal powder, tools and office equipment. Roughly 50 per cent of the purchases are on contract.

Group contracts are negotiated by the buying controller and member

firms are notified of contract details. Actual buying is the job of individual departments, varying in size from one man to a purchasing manager with a staff of 40. The controller has a personal staff of five, and answers direct to a member of the parent board.

Case history 2

Many firms, like Kodak Ltd., put their purchasing on to a more informal basis. Says A. Colston, their chief purchasing agent, "Our policy is to establish ourselves with regular suppliers on a personal basis. We encourage personal contact and discuss terms in a social get-together." In this way, Kodak do a lot of contract buying. They claim this has a stabilizing influence on long-run prices. Being on good terms with a supplier can get you out of a jam.

Kodak have had a purchasing officer for some 50 years. Mr. Colston controls all the buying for the whole Kodak organization in the U.K., although another buying team will shortly be set up at their Stevenage camera and light engineering factory.

He has superintendent rank, and answers in the line hierarchy to the assistant factory manager, and upwards to the works director and deputy managing director. This is general policy, but in practice the purchasing department is a self-contained unit, free to cut across line authority and do its own contacting within the numerous divisions.

Mr. Colston has a deputy and seven specialist buyers. Each is concerned with a specific range of Kodak's huge input, which includes chemicals, ferrous and non-ferrous metals, plastics, electrical parts, paper and board, packaging materials, and engineering equipment.

With capital items, the engineering departments start purchasing negotiations, but the buying department is responsible for commercial contract conditions. Normally, buying is against requisitions submitted by the user-departments. The chief purchasing agent also works in close



liaison with the factory planning department.

Case history 3

It is essential for a buyer to have a finger on the pulse of his company. Only if he is on the same level as other functional heads can he share responsibility for buying policy.

The Morgan Crucible Co.'s production departments are largely autonomous. Each has its own regular meetings. R. J. Mitchell, the purchasing manager, attends these whenever supplies are discussed. Thus he gets an up-to-date broad picture of departmental needs and activities.

Morgan Crucible have 3-4,000 employees. Their products include carbon brushes, refractories for furnaces, heat-resisting bricks, resistors for radios, and sintered metal parts.

The buying department has full authority—no other department can commit the company to any form of expenditure in this field. Minimum and maximum stock level are drawn up in collaboration with user-departments. In the case of serious disputes, a director is called in.

Each of the many subsidiary companies has its own purchasing department. Mr. Mitchell handles contracts for the materials common

continued on page 119

Purchasing Built Up This Business

Carefully studied purchasing is the main reason for the outstanding success of Bluebird Caravans Ltd., Parkstone, Dorset.

They are by far the largest builders of caravans in Britain, producing about 300 units a week. Big sales are ensured by keenly competitive prices. Careful buying of raw materials is the key. The chief materials are aluminium sheet, hardboard, plywood, glass wool, and steel.

Managing Director William Knott does all buying himself because he regards this function as too important to delegate. He buys on the largest scale to get the best prices. At any time his material stocks may be worth up to £1 million. The risks involved in tying up so much capital are great, but calculated. Stocks seldom exceed three months' supply. Mr. Knott appreciates that if material prices fell considerably he might suffer a loss—but so far his policy pays off handsomely.

He buys wherever he can get the best price, even if it means going half round the world. For materials such as plywood and hardboard he is in constant touch with shipping agents who know him as a bigger importer than many timber merchants. They know when, for instance, Japanese plywood is a better 'buy' than Canadian or European.

But Mr. Knott can often get bargains by making agreements with a supplier on the spot. He might, on one of his Continental visits for instance, make an offer for a substantial part of a factory's output of hardboard or ply.

Considerable savings, too, can often be effected by 'purchasing transport' on a large scale. If Bluebird buy a shipload of timber they get advantageous freight rates. The Bluebird site is remote from the larger ports such as Southampton and London.

But by guaranteeing regular cargoes for smaller low-draught ships that can enter the nearby harbour of Poole, Mr. Knott achieves two things: he saves on ship freight, on land transport from the main ports, and on harbour dues; and brings trade to a local harbour that can well do with it. Thus Mr. Knott ships finished caravans from his 'own dock' at Poole much in the way that Fords ship some of their cars from their Dagenham dock.

BUSINESS BOOKSHELF

ORGANIZATIONS, by J. March and H. Simon (Chapman and Hall) 48s. net, 50s. post paid. This is a many-sided subject. The sociologist's approach differs from that of Taylor and his followers; the economist's approach from that of the psychologist. And the doggedly 'down to earth' executives probably disagree with the lot of them.

The authors of this American book have tried—with reasonable success—to organize these diverse ideas in a single framework. Theories of organization are set against the empirical evidence by which they are tested.

Such chapter heads as "The Cognitive Limits on Rationality" are a little off-putting (at least to British eyes) but the book contains much useful information for the businessman who does not insist on light reading.

NATIONALISATION IN BRITAIN, by R. Kelf-Cohen (Macmillan) 25s. net, 26s. 6d. post paid. Four parts of a topical book sub-titled 'the end of a dogma' cover the birth, theory, practice and future of the public ownership of industry.

It was in 1918 (one year after the Russian Revolution) that the Labour

Party adopted its aspirations towards "the common ownership of the means of production, distribution, and exchange." Now, 40 years later, the Party are still debating among themselves the significance of those words.

Many problems that the now publicly-owned industries have inherited have not been settled by the change in ownership, but rather aggravated by it. The inherent difficulties of nationalization persist. Neither commercial efficiency nor consumer consciousness are easily reconciled with monopoly—statutory or otherwise. "The nation comes into contact with these (statutory) monopolies as consumers and it is as consumers that they judge them. That is the most important lesson the nationalized industries can learn."

DIRECTORY OF OPPORTUNITIES FOR QUALIFIED MEN, 1959

(Cornmarket Press) 8s. 6d. net, 9s. 2d. post paid. The reference section of this directory gives the qualified job-hunter information on nearly 100 large employers—commercial and industrial firms and government departments. There is also an 'editorial' section which includes a useful list of short-term executive

courses. Twenty thousand copies are being distributed free of charge to newly qualified men and women.

WORK STUDY IN THE OFFICE, by Harry P. Cemach (Current Affairs) 25s. net, 26s. 6d. post paid. One thing which has hampered the development of O & M in British offices is a shortage of factual information on what is so easily presented as a sort of mystique. This book—based on a series of lectures at Enfield Technical College—goes a long way towards filling the gap.

It is not a weighty instructional manual for the O & M practitioner. Rather it is designed on the lines of an executive appreciation course.

The accent throughout is on the principles of applying systematic investigation and scientific analysis to office jobs. A number of procedures are described, but their most useful function is to illustrate the right approach to the subject, and to provide evidence of the results which can be achieved in this field.

Appropriately, the book is laid out in an orderly fashion and the contents are well 'signposted.' The 166 pages (including appendices and index) are divided into six sections: Introduction; The Work Study Approach; Method Study; Work Measurement; Developing the Best Available Method; and The Final Stages. These, in turn, are sub-divided into a total of 26 short, businesslike chapters. There is a good sprinkling of tables and illustrations.

'FOSSETS' by Horace White (Fawcett Preston and Co.). Another example of the current trend towards well-produced company histories. Naval guns to fight Napoleon, mortars for Crimea, gun carriages for the Boer War, shells and engines for two world wars—altogether, a fascinating record of an engineering firm's achievements during its "first 200 years."

STAPLES ON BACK DUTY by P. F. Hughes (Gee) 27s. 6d. net, 28s. 6d. post paid. Seventh edition of a standard text on the law and practice relating to the settlement of liability to taxes where income has escaped assessment at the proper time.

TRADES REGISTER OF LONDON 1958 (Kemp's Printing and Publishing Co.), 63s. post paid. A comprehensive guide to merchants, manufacturers, importers and exporters, shippers and professional and general trades in London.

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A Personal Request from the Editor

BUSINESS

MERCURY HOUSE,
109-119 WATERLOO ROAD, LONDON, S.E.1.

FOLD AND TUCK IN

Dear Reader,

We want to help you by providing an even better BUSINESS. For this we need your help.

Are we giving you the sort of information that is most useful to your firm and to your personal business career? Are we presenting it in the right way?

Your candid views are wanted. Please co-operate by ticking your answers to the questions on the back of this form. All replies will be treated in the strictest confidence.

Thank you very much.

Yours sincerely,

Peter Spooner

Editor.

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The EDITOR,

'BUSINESS,'

MERCURY HOUSE,

109-119 WATERLOO ROAD,

LONDON, S.E.1.

Frankly What do you think about

BUSINESS?

PLEASE TICK THE APPROPRIATE SQUARES

1. DO YOU WANT MORE FEATURES ON:

- ☐ Top Management Structure (e.g. relations with subsidiary companies, delegation of authority, span of control)
- ☐ Company Administrative Systems (e.g. order handling, production planning, stock control)

- ☐ Personal Administrative Methods (e.g. successful methods of top men, relations with colleagues and staff, winning support for your ideas)
- ☐ New Developments in Management (e.g. automatic data processing, operational research, cybernetics)

2. DO YOU READ:

Regularly Occasionally

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| <input type="checkbox"/> | <input type="checkbox"/> | State of the Nation |
| <input type="checkbox"/> | <input type="checkbox"/> | March of Business |
| <input type="checkbox"/> | <input type="checkbox"/> | Labour News |
| <input type="checkbox"/> | <input type="checkbox"/> | Management at Work |
| <input type="checkbox"/> | <input type="checkbox"/> | People, Products, Places |
| <input type="checkbox"/> | <input type="checkbox"/> | Letters |
| <input type="checkbox"/> | <input type="checkbox"/> | Bookshelf |
| <input type="checkbox"/> | <input type="checkbox"/> | Legal Q & A |
| <input type="checkbox"/> | <input type="checkbox"/> | Science Prospect |
| <input type="checkbox"/> | <input type="checkbox"/> | Office Equipment Survey |
| <input type="checkbox"/> | <input type="checkbox"/> | Factory Equipment Survey |
| <input type="checkbox"/> | <input type="checkbox"/> | Canteen Equipment Survey |

3. WHICH CASE-HISTORIES ARE OF MOST VALUE TO YOU:

- ☐ Market research
- ☐ Order handling
- ☐ Research and development
- ☐ Financial and budgetary control
- ☐ Cost control
- ☐ Accounting methods
- ☐ Production planning and control
- ☐ Delivery scheduling
- ☐ Stock control
- ☐ Materials handling
- ☐ Office and factory layouts
- ☐ Planned maintenance
- ☐ Organisation and methods

4. DO YOU LIKE OUR METHODS OF PRESENTATION:

Front cover design

Headline treatment

... Like ☐ Dislike ☐

... Like ☐ Dislike ☐

Highlighting the main points of each story by boxed captions, summaries, etc. ... Like ☐ Dislike ☐

Picture stories ... Like ☐ Dislike ☐

5. HAVE YOU ANY OTHER SUGGESTIONS OR CRITICISMS ABOUT 'BUSINESS'?

Nature of Your Business

Size of firm ☐ under 200 employees ☐ 200-1,000 employees ☐ over 1,000 employees

Your position in firm

Optional
and not for
publication

The following information would be useful to us but is not essential:

Your Name

Name of Firm

Please complete and post this form TODAY—no postage required

THANK YOU FOR YOUR CO-OPERATION

SPOTLIGHT ON A NEW AID
TO EXECUTIVE DEVELOPMENT

In a couple of days executives
get several years of decision-
making 'experience.' They
also learn a great deal
about the interdependence
of departmental jobs

A Game of Managers

by Peter Spooner

THE diehards insist that the arts of management cannot be taught—only learned by experience. Exponents of management education answer the challenge by injecting more and more 'experience' into their training courses. This takes various forms, including role-playing, syndicate work and the use of live case-studies.

Now a more ambitious training device has reached Britain. Similar in principle to some of the Army's 'dry' exercises, it enables men without factories, capital or staff to become personally involved for a short spell in the strategy and tactics of top management decision-making.

This is done by using the technique of simulation. Mathematicians build a dynamic model of a simplified business situation, the development of which depends on the inter-action of many different factors.

The decision-making game (as it is popularly called) is considerably



The game does not 'teach' decision-making. But it gives members of middle management a top executive's view of business forecasting and planning.

more than a hotted-up version of 'Monopoly.' Quick, clear thinking, rather than luck, determines the outcome. Within the limits of the model, each decision by the players produces the sort of result which would be expected in real life.

Usually the effects of their decisions are worked out on an electronic computer. This is not an essential feature—'computer-less'

games are now being developed in Britain and on the Continent. But a computer has the advantages of being able to store a complicated model and calculate changes at very high speed. Thus years of operating experience can be telescoped into a day or two's play.

The pioneers of this new training aid were the American Management Association. Their

game, involving the use of an IBM 650 computer, got a lot of publicity about 18 months ago. Since then, the International Business Machines Corporation have been developing different models on their own account. These are being introduced to Britain by IBM United Kingdom Ltd.

The international corporation use the game in their own middle-management development programme, and the British company are now following suit. Beyond this, IBM have no intention of gate-crashing the industrial training field; their main object is to demonstrate a new application of electronic data processing. They believe, nevertheless, that the opportunities provided by the game will be picked up by other organizations.

At present it is being played only at their London data processing centre. However, they are also offering the programme to existing 650 users, in the hope that these will make it available to nearby universities and technical colleges.

What does it teach?

If it were claimed that the game 'taught decision-making,' the whole idea might be suspect. Making business decisions involves more than logical thought and an intelligent assessment of facts; it cannot be divorced from questions of long-term responsibility, staff relationships and emotional stress (far greater than the excitement of taking part in a competitive exercise!)

The American Management Association soon found that it was unwise to use the game on its own. In their experience, it is most effective as a means of practising things which have been learned in more orthodox ways—principally to demonstrate how principles are likely to work out in live situations.

IBM have similar ideas. Their first model (described later) is intended to give members of middle management a top execu-

tive's view of the interdependence of different specialist functions. This is more likely to achieve concrete results than any attempt to improve the individual's natural capacity for making decisions.

In the parent company's executive development programme, the game has been fitted into a very intensive four-week course. There are a couple of two-day sessions—one near the beginning and the other near the end.

The model

The model simulates the competition between three companies which are marketing an identical but unidentified product at a unit-price of about £40. Each company has its head office and factory in a separate area, and there is also a fourth 'common market' area where no competitive firm is situated. Their geographic relationship is shown in the diagram on this page.

The three companies start on equal terms. Although they have fine possibilities, they are not in a very good financial position since the current selling price gives an inadequate margin in some areas and the return on investment is small. By deploying its resources skilfully, each company has to try to secure a better margin. The sales potentials of the four areas vary, but none of them is near saturation-point.

Sensible decisions on expenditure produce equally sensible results; no tricks have been built into the model. But of the millions of possible combinations which can occur at any time, each company controls only one-third. Therefore the results of its decisions partly depend on those made simultaneously by its two competitors.

At the start of the game, all companies have exactly the same information in front of them. Thereafter they get individual statements containing:

—Confidential information on the company's own activities



In the IBM model, three companies market a similar but unidentified product. Each has its head office and plant in a separate area (1, 2 and 3 respectively) and all compete on equal terms in a common market (4) where no competitor is based.

(orders received, units sold and marketing costs in each area; production reports and estimates, including unit costs; current assets and income.)

—The sort of information on competitors' activities (selling prices) and general market conditions which would be available to the management in real life.

Operating decisions are made quarterly. Each company then has the opportunity to adjust its prices, up or down, in any of the four areas. Simultaneously, it decides how the available cash is to be allocated to:

- 1—Production.
- 2—Marketing.
- 3—Transportation.
- 4—Research and development.
- 5—Plant investment.

Since the potentials of the four markets are unequal, the company has to decide how and where to direct its sales efforts. Outside the 'home' area there is a transportation charge which may or may not be passed on to the consumer.

Additional manufacturing capacity can be bought at a fixed rate per unit. The penalty for operating

Pats or Kicks?

The reply-paid questionnaire on page 76 is designed to elicit both. Please help us by using it.



Effects of the players' decisions are worked out—in a matter of seconds—on a 650 computer at IBM's London data processing centre. The same calculations would keep a team of mathematicians busy for several hours.

the plant at less than full capacity is a higher unit-cost.

The consequences of one decision may spread over several quarters. For example, a higher investment in research and development will increase sales (other things being equal) but this will not take place immediately. Similarly, the effect of a change in marketing expenditure will extend beyond the operating quarter in which it is made.

To keep the model—and the game—reasonably compact, the basic situation has been simplified in various ways. One simplification is that each quarter's operations have to be financed from cash in hand, producing an abnormally high ratio of cash to total assets. Another is that buildings and equipment are depreciated at one fixed rate; yet another, that price changes can be made only in whole pounds.

There are no seasonal variations in the economy; nor does the model contain 'freak' situations. As the game progresses, the administrator can alter certain aspects of the economy—for example, the sales potential of a particular area—but the players are notified in the form of 'Reuter' announcements. Such changes, moreover, are never of a violent nature.

How it is played

The game is played by 12–15 executives, divided into three teams. There is no exchange of

information between them, apart from that published in the quarterly operating statements.

When demonstrations were held recently in London, each team was supervised by an IBM representative. This was to ensure that all decision-making was kept within the limits of the model, and also to eliminate any danger of the game being wrecked by injudicious decisions at the outset. (For example, the over-enthusiastic manipulation of prices could quickly reduce a company's cash resources to zero and thus prevent the game from continuing.)

A 'decision-making laboratory session' usually lasts for two days. It begins with a briefing, during which the test administrator explains the vagaries of the model, and ends with a post-mortem.

Once the game has got into its stride, each quarter's set of decisions has to be made in 20 minutes. This haste increases the training value. The teams soon find that it is difficult to consider every facet of their operations in a free-for-all discussion. Therefore, they are virtually compelled to organize themselves on 'company' lines, with individual members acting as chairman, sales director, production director, etc. The responsibilities are sometimes rotated as the game progresses.

At the end of each period of deliberation, the teams write their decisions for the coming quarter

on a special form. The forms are then taken to the data-processing centre.

The computer checks the information (to see, for example, that no company has allocated more cash than is currently available) and co-ordinates it with the model. In less than 10 minutes, individual statements are returned to the teams. These summarize the results of their operations during the previous quarter, and provide spaces for the next set of decisions. They are printed on a Type 407 accounting machine.

If the game runs smoothly, the teams make between 16 and 20 sets of decisions before the post-mortem is held. This represents an operating period of up to five years and thus allows the results of early policies on such expenditures as research and development to work out fully.

To help its decision-making, each team keeps graphs, tables and charts, chosen on its own initiative. One record which must be kept is the relation between expected and actual sales (by units) in each territory. This provides an index to the team's forecasting ability.

At the post-mortem session the chairman of each company briefly describes the objectives drawn up by his team at the start, and also explains why certain actions were taken to attain these. (Some kind of 'log' is kept, so that the reasons for early decisions are not

continued on page 121

Executive Holidays

It's time to plan this year's
escape from your desk

A holiday begins with the train, boat, or plane. Air travel is practically essential to make the most of a short holiday abroad and it is likely to become cheaper. On the other hand, for the executive with time to spare, travelling can be as pleasant as arriving.

GET THERE QUICKLY—New York is 10½ Comet flying hours from London. The Britannia takes three hours to Rome, and 23 hours to Johannesburg.

GET THERE SLOWLY—A cargo boat carrying anything from two to a dozen passengers gives an exclusive cruise-like voyage, to any foreign ports, with first class amenities. Choose the boat to suit your fancy. If one port captivates you, let the boat sail on, and catch the next—if you know it can take you.

A CAR WAITING—Most airline and shipping companies have agreements with local car hirers in the larger foreign cities of any size. So there is no need to take your car abroad. The first £35 of the cost can be paid in this country.

GET THERE INDEPENDENTLY—Hire a plane. There is no red tape other than the usual passport. Anyone with a private pilot's licence can hire an aeroplane from Vendair Ltd., Croydon, by the hour, day or week. The cost is between £3 and £8 per flying hour, depending upon the type of aircraft; a deposit of approximately £40 is required.

INCLUSIVE HOLIDAYS—The travel firms' tours meet any requirement. Here are some examples.

Round the world in 94 days (Cooks), taking in Africa and India, visits to Singapore, Melbourne, Honolulu and New York.

For those interested in the industrial and agricultural advancement of Russia, Intourist offers tours which include visits to factories, power stations, and collective farms.

Angling Holidays Ltd., who have the fishing rights to many beats in Europe, will arrange 'all-in' holidays. Those with a taste for exotic hearthrugs can even go on Arctic safari for polar bears.

Unusual Hellenic cruises are organized by Swans Tours to Sparta, Rhodes, Troy and other classical remains. British university lecturers accompany the cruises to give on-site talks.



OUT OF THE GROOVE

No phone bells here to remind the cruising executive of reality. Cut off for weeks from business, he eats, talks and relaxes with a new community. Fostered by luxurious food and accommodation, new friendships are made. The shuffleboard being played on the deck of the *Mauretania* is only one of the many recreations. Stabilisers make sea-sickness a thing of the past.

SNOW IN SUMMER

The slopes of the Aosta Valley at Cervina, Northern Italy, are unique in that they are the only easily accessible slopes in Europe which provide smooth, fast skiing during the summer. There are many 'runs.' The surprisingly warm sun gives a dark tan.



BIG-GAME FISHING

The Azores and Bahamas have each been called the Mecca of fishermen. The morning can be spent fishing for bass in an inland pool and the afternoon in catching tuna. This is exhilarating. It gives the angler an opportunity to measure his skill and courage, battling the powerful fish which abound in these waters.

But for the novice, Angling Holidays Ltd. arrange instruction on well-stocked trout ponds within 20 miles of London.

'The Executive Life' Supplement



NEW WORLDS

Due to its exceptionally clear, calm water, Lake Eilat in Israel is one of the best spots for underwater swimming. The buoyancy of its salty water brings the beautiful designs of coral, multi-coloured sands and submarine vegetation within the scope of even the poor swimmer. Harpoon in hand he becomes a hunter, silently tracking fish through their domain.

AWAY FROM IT ALL

Pure air, good food, peaceful surroundings—not everyone's idea of a holiday, but ideal for anyone who shrinks from replacing the business whirl with an equally exhausting one of sport, travel and night-life. There are many such havens of peace and quiet here and on the Continent—like the Benedictine Abbey at Kylemore, Co. Galway (top) and Molins Hotel, Majorca (below).



ALL ON A PLATE

The lazy—but wealthy—executive will find that everything is at hand at the Bergenstock Estate, Switzerland. This comprises two luxurious hotels and one first class hotel poised 1,500 ft. above Lake Lucerne. Together they form a self-contained community. There is a private motorboat for excursions. The fastest lift in Europe reaches the top of the Hammet-schand in a matter of minutes to give a glorious view over mountains and lakes.



ONLY CAMERAS ALLOWED

Though guns are barred in the game reserves of South Africa, Rhodesia and Nyasaland the tourist finds animals and landscapes sources of endless delight. Further along this road, the car may well be in the centre of a pride of lions. But there is no need to worry if you stay in your car.

Hunting Clan hope to operate inclusive air tours of East and West Africa during the summer.



BRIGHT BY DAY AND NIGHT

Despite the fast rise in popularity of other coasts like the Costa Brava, the French Riviera is still the chief tourist 'draw'—not just in France but in the whole of Europe. The reasons are well-known—'guaranteed' sun, excellent hotels, warm bathing in the tideless Mediterranean, sailing, and a gay night life. Add to these the fact that the Riviera is now closer to Britain than ever by plane or fast train. Photograph shows Cannes bay.

New Casting Method Gives Designers More Scope

DEVELOPMENTS in various industries have presented engineers with the problem of producing complex shapes from materials which are becoming increasingly difficult to fabricate, forge or machine. Consequently there is a new interest in precision casting methods—especially those in which the moulds are made by 'investment' on disposable patterns.

The basic idea of investment casting originated about 4,000 years ago. The ancients sculptured their statuary in wax (the pattern) and then covered this with wet clay (the investment). When the clay had dried, they melted out the wax and obtained their metal statue by pouring molten metal into the resulting cavity. What the new process does is to replace the wax pattern with one made of mercury frozen to the hardness of lead.

Liquid mercury is poured into a steel or anodized aluminium die, then frozen in an acetone bath at about minus 90 deg. F. Because of its high density and good wetting properties, it accurately reproduces the shape of the thinnest section and most intricate contour.

The frozen pattern is then removed from the die and repeatedly dipped in a liquid refractory. When the coating has dried, the mercury is allowed to melt out at room temperature, leaving the refractory as a shell or mould. After firing at 1,850 deg F., this mould is strong, stable and inert to most alloys.

Intricate shapes? 'Unmachinable' metals?

The frozen mercury process may provide an answer.

As a pattern material frozen mercury provides four major advantages:

1—**Bigger investment castings.** On melting, a wax or plastic pattern expands about 9 per cent, imparting a relatively high strain to the mould

highly permeable, suction techniques can be used to produce castings of extremely thin cross-section. The moulds are also readily adapted to other mechanical casting methods.

The thinness of the mould wall simplifies the removal of cores. Where other pattern and mould materials are used, the heat of the metal being cast often vitrifies the cores, making them extremely expensive to remove. In the frozen mercury process, the thin cores are easily broken up.

Finally, in contrast to the block mould employed by other investment techniques, this special shell mould permits closer metallurgical control during casting. Its carefully selected surface finish ensures an even flow of metal into it, thus preventing deformities in the shape of the casting. Its permeability ensures that any air trapped in the mould during casting can escape. Its thin-

by Alan Collard

walls—high enough to rupture them unless they are very heavy. The amount of strain the mould walls can stand limits the size of the castings which can be made.

Mercury, on the other hand, expands only about 3.5 per cent on melting. This means that larger castings can be made.

At the same time, thinner-walled moulds can be used. Since these are

ness makes it possible—by backing sections of the mould with materials of different thermal conductivity—to vary the cooling rate of different parts of the casting, and hence their grain structure and strength.

2—More complex castings. After freezing, one piece of mercury will fuse inseparably with another. This 'self-welding' property makes it possible to produce very complex shapes, especially those involving intricate internal cores which cannot be withdrawn from the pattern. Such shapes are achieved by making the pattern in two or more parts—rather like a three-dimensional jigsaw—then joining them in a precision jig and coating with the ceramic.

To obtain similar castings from wax or plastic patterns would mean 'gluing' the bits together—with doubtful results on the maintenance of tolerances and shape.

3—Fewer rejects. When wax patterns are used for investment mould castings there is a tendency for the wax to clog the pores of the mould. After the mould has been fired, the wax remains there in car-

bonized form unless a very high temperature is used. Unfortunately, firing at a high temperature requires expensive investment materials to prevent breakdown of the mould. Again, some types of wax react chemically with the investment material.

Mercury, however, normally leaves the mould quite cleanly. Any that does not is vaporized by the heat applied to fire the moulds. The proportion of rejects among frozen mercury investment castings is therefore less.

4—Faster moulding. The production of a mould by the lost wax process takes anything from 25 to 50 hours, due mainly to the firing time needed. The frozen mercury process can produce a mould in about two hours.

Production economies

First and foremost, the frozen mercury process offers more scope to designers. They can treat components in a purely functional manner unhampered by manufacturing problems. Metals too hard for

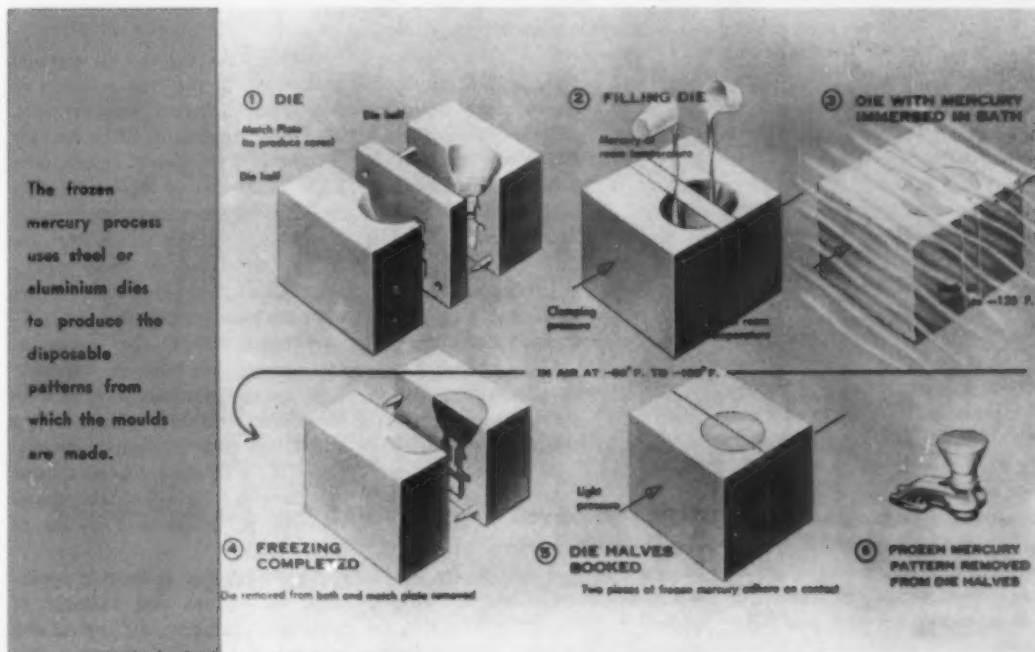
machining can be cast to closer tolerances. Components too intricate for normal machining can be cast to shapes that need only a little 'finishing off'.

With expensive materials there is a big saving in scrap. Also it is possible to modify the design of a component without having to reorganize the production line, fit new tools or change cutting times. Parts that would otherwise have to be made in sections can be produced in one piece—one manufacturer eliminated as many as 25 assembly operations by using frozen mercury castings. Another reduced the cost per unit from £150 to £60.

How it developed

Frozen mercury investment casting has been an industrial process in the United States since 1950, when it was introduced by the Mercast Corporation. It became generally available in the U.K. in 1956 through the sole operating licensee outside the U.S.A.—Sankey-Telcor Ltd.

This company is jointly owned by



Pattern for part of a jet engine combustion chamber is dipped into liquid Zircon-base refractory material. The first coating has a fine texture for imparting smooth finish to the casting. Subsequent coats are coarser, giving strength to the mould.



When the moulds have dried, the mercury patterns are melted out and reclaimed for further use. After mild infra-red heating the moulds are fired—removing all solvent. Total mould-making time is about 2 hours, compared with between 25 and 50 hours for 'lost wax' moulds.

The moulds are suitable for all casting techniques. Because of the thinness of the walls, different parts of the castings can be cooled at different rates, thus providing better control over their metallurgical properties.



Guest, Keen and Nettlefolds Ltd. and The Telegraph Construction and Maintenance Company Ltd., and supplies manufacturers with finished castings. A.I.D. chemical analysis and associated facilities are made available by the Telegraph Construction and Maintenance Co., on whose site at Crawley, the new factory has been built.

Current uses

Typical components being made by this process at present include turbine blading; jet engine exhaust support rings; aircraft fuel pumps with cast-in jets; guide vanes and sector blades; fuel valves for rockets and aircraft; rocket motor parts and bodies; sorting brackets; heat diffusers; nozzles; funnels; waveguides; gyroscope gimbals and other parts for electronic and radar equipment.

In many cases greater design flexibility has made it possible for one part to serve more than one function. For example, gyroscope gimbals were designed not only to support the gyro but also to act as a key feature of the mounting. In such cases manufacturing costs can be reduced drastically.

In the U.S.A. the process is being used to satisfy the increasingly rigorous demands of such industries as petroleum, heavy chemical processing, food processing, power generation, transportation, metal working, and electronics.

Future prospects

For the gas turbine to be used successfully for land transport, economic production of turbine wheels in 'difficult' alloys will be essential. The only feasible tech-

nique is by casting, and the mercury process is in the best position to meet the stringent requirements. The same applies to turbo-charger components for diesel engines. The high initial cost of tools will easily be offset by quantity production.

The super alloys which are now being introduced to resist creep, fatigue and thermal shock are very difficult, if not impossible, to forge and machine. If he sticks to 'traditional' methods of manufacture, the designer may have to limit himself to relatively simple forms and alloys with inadequate properties. If he chooses precision castings, however, he will obtain greater freedom in design and choice of materials.

As more designers learn to appreciate the virtues and features of precision castings an increasing number of uses will emerge. *END*

Facts about NU-SWIFT

Nu-Swift Ltd., founded in 1933, is to-day the world's leading manufacturer of proprietary fire extinguishers.

Nu-Swift extinguishers are installed in every ship of the Royal Navy, and in the ships of 17 other fighting navies.

They are in 3 Royal Yachts, including H.M. Yacht 'Britannia'.

In more than 70 countries, Nu-Swift extinguishers are installed and used for the protection of industrial, commercial, agricultural, transport and residential risks.

The annual output of Nu-Swift Ltd. now exceeds 250,000 units.

The number of employees in Britain has grown to 350, and the Nu-Swift Model Factory at Elland, Yorkshire, has had to be extended again and again.

The paid up capital of the Company is £210,000.

Reasons for success of NU-SWIFT easy-to-handle, certain-to-operate Extinguishers

The impressive record of Nu-Swift Ltd. is largely due to:

- a) A bold decision to break with a tradition of manufacturing chemical extinguishers of doubtful efficiency and cumbersome operation which, until the advent of Nu-Swift, virtually held the field.
- b) Purposive research and development, resulting in the design and manufacture of safe, efficient and reliable equipment of greater fire fighting power in relation to its size and weight.
- c) Intensive mechanisation and the use of modern industrial techniques which have resulted in greatly improved products at low man-hour cost.

Safety, efficiency and reliability are vital factors in the design and manufacture of fire extinguishers. To these qualities, Nu-Swift has added simplicity of operation, standardisation to eliminate confusion, ease of maintenance, durability, and the facility for the rapid recharging of certain types.

Nu-Swift extinguishers are the best in the world, produced by a Company whose declared policy is that, in the fight against fire, when the amateur fire fighter has to battle alone, only the best is good enough.



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**Wherever you are, in Britain or abroad, you will be wise to find out
how Nu-Swift can protect you better.**

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How to Get Rid of the Unwanted Visitor

(or are you one yourself?)

by John Martin

AT this very moment, in thousands of offices, both large and small, the following dialogue is taking place.

Host (rising hopefully from his chair): "Well, old boy, it's been very nice to see you. Mind you drop in again whenever you're round my way." (Thinks: and next time I'll be sure to be out. It's people like this who are the cause of all the overtime I do.)

Visitor (trying to make a graceful getaway): "That's fine, George. (Looks at watch.) Well I must be getting along."

(awkward pause)

Host (in desperation, trying to fill the silence): "Oh, by the way, how's your daughter these days? I believe you said she was going to do a secretarial course. I suppose she's earning more than you by now!"

Visitor (sinking down into seat again): "Well, as a matter of fact she's . . ." (Thinks: Will the old fool never let me go? I'm already late for my next appointment.)

Three-quarters of an hour later:

Host: "Well, old boy, it's been very nice . . ."

Does this dialogue sound horribly familiar? The problem which it exemplifies is a very real one in business today. Maybe you recognize yourself in the part of the reluctant host suffering agonies of boredom occasioned by the too-persistent visitor. Maybe you are the guest who never seems to acquire the knack of getting out of a room gracefully. Or are you that unhappy man, the amalgam of both characters, who, which ever side of the desk he is on, is unable to terminate a conversation which has ceased to be useful to either party.

In any of these situations, you are probably in grave risk of early decease from overwork, since you are obliged to carry out the serious labour of the day in the small hours, the entire working period having been frittered away in useless small-talk.

The problem of how to make (or force) a graceful getaway is no modern one. "Friends are the thieves of time," said an anonymous seventeenth-century sufferer. A folksy Danish philosopher (a genus which usually expresses itself with more frankness than

elegance) put it even more brutally: "Fish and guests stink after three days." Amend the period to 15 minutes, and you succinctly express the opinion of the average modern executive.

Let us suppose, for the moment, that you are in the shoes of the unwilling host. What can you do



If you must walk through your secretary's office when a visitor is there . . .

to rid yourself of these intolerable visitors?

Prevention, it is acknowledged, is better than cure. The crux of the matter is to take careful precautions to barricade yourself against the entry of any unauthorized person.

For this task there is no better watchdog than the well-trained



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FEBRUARY, 1959

**When
they
say...**

**"Last quarter's figures? I want figures
correct up to yesterday!"**

**"Give me a running total of material costs.
Yes, now ..."**

**"Let's have a breakdown of sales figures by
area immediately, please."**

**"How many in South-West England?
Let me know as soon as possible, will you?"**

KEYSORT
pinpoints the answers
at once!

**The simplest,
least expensive
method of
record analysis
ever
devised**

KEYSORT...

- makes use of *existing* records. Duplication is not necessary.
- sorts and classifies an infinite variety of data, supplies information immediately.
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- SAVES TIME, MONEY AND TEMPER. PROVE IT FOR YOURSELF: RING MONARCH 4020 FOR A DEMONSTRATION:

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Makers of

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secretary. Admittedly, to find this treasure ready-made is good fortune equivalent to discovering uranium in your back garden. But what the Curies did with pitch-blende, you can do with the average intelligent and willing stenographer—provided you are willing to put in the necessary work.

All women are, of course, fluent and practised liars. It is up to you to cash in on this invaluable asset. Your natural tact will ensure that you do not reveal your own opinion on this subject. "Miss Smith, I rely on your discretion (a most flattering term, this!) to see that I am not disturbed. Don't let anyone in."

The telephone conversations you may hear (from Miss Smith's end) as a result of this injunction will make your hair stand on end. But remember, if the scheme is to succeed and you do not want abruptly to lose Miss Smith's services, you must be prepared to back her up to the hilt. Answer politely (if non-committally) any subsequent inquiries you may receive on (a) your health after an operation for acute appendicitis; (b) your trip to Glasgow; (c) your top-level conference on Tuesday; (d) your wife's sudden illness.



"Too busy, old boy, that's the trouble."

Given your good secretary, here are a few more ways in which you can help her.

- 1—Never, on any account, answer your own telephone—even if you suspect it's that blonde you met last night. After all, Miss Smith is to use her discretion—remember?
- 2—Never walk through your secretary's office when you hear voices there. If she has just told

someone you have gone off to Hong Kong to chase up an export order, you are not going to make it any easier for her.

- 3—It is better, of course, to have two doors to your office. If you *must* walk through your secretary's office when a visitor is there, move fast, look straight ahead, and carry your hat, brief-case and umbrella. In passing you call out "Back at three!" and walk straight out of the door before the visitor has had time to open his mouth. (Miss Smith will keep him talking until you are well out of the way.)
- 4—The third method can be slightly varied if you know the prospective visitor comes from your own organization. In this case, abandon the hat, and mutter the managing director's name. "Sorry John, but you know I mustn't keep J.K. waiting."

- 5—Never fall into the temptation of stepping into a cupboard. This device (with attendant disastrous results) has been used too often in comic films.

Now suppose that all your efforts at prevention have been useless. Some crass fellow has managed to crash through all obstructions; or your invited guest, with whom you were quite happy for the first 15 minutes, shows every sign of intending to stay the night.

Here, again, the well-trained Miss Smith is an invaluable ally. If she has been with you for some time you have probably reached the stage where communication between you takes place by a kind of supernatural radar. Sensitive to your needs, she will become aware of distress signals percolating strongly through the intervening wall.

Soon, with an air of deep abasement, she will glide discreetly into your office. "I do hope you will forgive me interrupting you, Mr. Brown, but you did especially ask me to remind you about the board meeting at three o'clock (or any time 10 minutes hence)."

This is, of course, an obvious hint, and the reasonable visitor will take it. If, however, the dreadful fellow

lacks all human feeling, you are not beyond help. Wearing an expression of profound deprecation, Miss Smith will appear again with a message from the chairman that the board is waiting for you before beginning the meeting. This gives you an excuse for well-simulated panic and hasty farewells.

Ingenuity can soon devise variants on this theme for the inter-departmental visitor. In this case it would probably be an outside appointment you had to keep.

"That's all very well," you may be thinking, "but my secretary is not



a Miss Smith." Do not despair. The same sort of gambit may successfully be carried out by pre-arrangement over the internal phone. Instruct your secretary that if any visitor is with you for more than 15 minutes to ring through on the internal phone and ask, in carefully lowered tones, if you require to be rescued. This situation requires careful management on your part. If the answer is in the affirmative, phrase your answer in a carefully non-committal manner (or use a pre-arranged code reply) so that your visitor cannot guess the subject of the conversation.

If you have answered 'yes' the remainder of the procedure devised for Miss Smith can be carried out according to schedule.

These ploys can be carried out in modified form in the absence of a

continued on page 120



Turnover Doubled Every Year

— in a competitive field

HOW does an American firm get into a British market which is already served by a considerable number of British firms?

One way is to choose very carefully, at the outset, an outstanding Briton to head the new associated company in Britain. This is how, five years ago, a firm of safety-goggle manufacturers overcame the problem of opening up an overseas market. Parmalee (G.B.) Ltd. is the associated company, and 38-year-old Mr. E. Roy Mullins heads it.

Since 1954 Mr. Mullins has doubled the firm's turnover every year. He now employs nearly 100 and has won a substantial share of the safety-goggle market—in spite of the fact that there are 14 other firms in the field.

Materially, this expansion—almost entirely without outside help or capital—is remarkable. But the real growth has to be measured in terms of the impact made on the technical development and the provision of protective eyewear for industry.

Parmalee (G.B.) Ltd. are now at the forefront in dispensing the 'propaganda of safety,' not only to workers—but also to management. It is from management that the stimulus to greater safety must come. The realist's '75 per cent safety' is not good enough. With the right

approach and education, accidents can be reduced to an as yet unrealized minimum.

Where does American business find a suitable British executive to run an associated overseas company? In Parmalee's case they found him in a market research firm. The investigation work that goes with many years' experience in market research is quite a good background for building up the agency of an established foreign product.

Mr. Mullins attributes much of his team's success to their personal approach to industrial safety officers, and also to the way in which they express their obvious faith in their own products.

The company plays an active role in safety exhibitions and conferences, and they have associated their advertising with such famous firms as Rolls-Royce.

Mr. Mullins sits on the British Standards Institution committee for welding specifications, and is active in helping to form a Safety Section of the National Union of Manufacturers.

How has he built up a team that can help him put across his sales (he prefers 'safety') message? Mr. Mullins has his own unorthodox methods of testing and selecting the sort of personnel he needs. He looks for literary intelligence and




E. ROY MULLINS

"Contagious enthusiasm and awful energy."

the ability to argue and convince.

To be successful, candidates also need a particular kind of loyalty and keenness. Again, Mr. Mullins has his own ideas on how to detect these qualities.

In his experience, 'the bad judge of character expects the other man to be cast in his own image.' Many a businessman chooses badly because he is looking for the same traits in



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the other fellow as he has himself—he is looking for someone with fellow feeling. But Roy Mullins believes this to be a great mistake. More important than whether the candidate's standards and ideas happen to agree with yours, is whether the man's pattern of life appears to be an honest and persistent attempt to achieve some form of success according to his own standards.

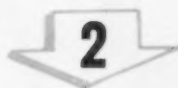
The importance of this point impressed Mr. Mullins during his five years as a prisoner of war. He then had ample opportunity to see other men at close quarters. In such confinement it would have been easy to quarrel; to avoid a flare-up one had to be quick to understand the other man's point of view and the things that irritated him.

Of course, being sensitive to the other fellow's point of view is fine enough. But it would be disastrous to be so sensitive as to be emotionally upset by opposing viewpoints. Roy Mullins has developed a calmness and stability which prevents this. Wide reading has given him an appreciation of the depth of many problems, and the need to have faith in a long-term objective which is not to be lost sight of during temporary and superficial reverses.

From this comes another characteristic which he believes important—decisiveness. This comes partly from applying the common rules of scientific reasoning: investigating a problem, assessing the facts, drawing from them such conclusions as are possible, and then applying the results. But there is more to it than this. The decisive executive is one who, after applying the results, is ready to put the problem behind him, confident that he has made 'the best decision in the circumstances.' So many business decisions have to be made in this way that a man who hesitates and frets over unknown and unknowable factors is left standing at the post.

As a leader, E. Roy Mullins inspires his subordinates with what one has called his 'contagious enthusiasm' and another his 'awful energy.' In the Mullins sphere of influence the 'status' is seldom 'quo.'

END



His Success Formula



ROY REEMER
Hat trouble taught him a
useful lesson.

Something Old, Something New

WHEN a young man has a little capital and a big urge to found his own business, there are usually two courses in front of him. He can try to sell a competitive product or service in an established field. Or he can pin his hopes on persuading people to buy a new product or service.

Thirty-one-year-old Roy Reemer has done both—first the orthodox and then the unorthodox. He started when he was 20 and had precisely £13 in capital.

The two parts of his business fit together neatly because each supports and attracts new customers to the other.

Mr. Reemer is a technician by

training but a salesman by birth. His selling career began as a result of big-headedness (he confesses) over his technical accomplishments. After completing his National Service, he was employed as a photographic printer by a well-known photographer for whom he had been working previously. One day the photographer criticized the quality of some of Reemer's prints. Reemer, nettled, declared that if he (the photographer) could do any better, he (Reemer) would eat his (Reemer's or the photographer's) hat.

The photographer could and did. Reemer, breaking a contract for the first and last time in his career,

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decided that it would be prudent to hang his hat elsewhere.

However, he had learnt an important lesson: the commercial value of quality. This became the mainspring of the professional developing and printing business in which he invested his £13. His prices were not 'competitive'; the quality of his service was. Within five years he had built up a reasonably large clientele.

Industrial orders

Then came a turning-point. One of the big oil companies began to give him a lot of orders. Reemer saw the opportunities in this field. From then on he went out of his way to attract work from industrial photographic units.

This soon led to the development of the 'new' part of his business—'Take It Yourself.'

The idea of Take It Yourself is that Reemer hires out complete photographic kits at the nominal rate of three guineas per month. Instruction and supervision are included. In return, the borrower undertakes—as a gentleman's agreement—to send his negatives to Roy Reemer Ltd. for developing and enlarging at the standard rates.

The service began as a half-joking challenge. One of his industrial clients grumbled about the cost of employing professional photographers on specialized jobs. Reemer suggested that the client should tackle such jobs himself—relying on Reemer's know-how to get the best results from the negatives. The client did so and found that it was successful.

Other firms did the same thing. Today Reemer has in commission more than 200 kits. His Take It Yourself clients represent a cross-section of British industry; and the actual button-pushers range from secretaries to top executives.

Inevitably this enterprise has encountered criticism. The professional bodies frown on it. But Reemer gently points out that their disapproval has not compromised his regular business; nor has it

dulled the lustre of his recently-acquired Rolls.

In any case, he emphasizes that Take It Yourself was never intended as a substitute for professional photography. Rather does it help to produce the sort of pictures which can only be taken by someone who knows the subject inside-out or is constantly on the spot. Aspiring Nurnbergs are brought down to earth, or even rejected if they continue to expect too much.

To the sceptics Reemer says that although Take It Yourself brings him a regular income of £600 per month in hire charges, this is hardly a fat return on a capital investment of nearly £25,000. The real profit comes from the sales of prints—and people do not order large numbers of these unless the pictures are good.

At a recent exhibition in London—neatly titled 'The Pictures That Might Never Have Been'—Reemer proved his point. The pictures were good. The clients who took them included many top-line firms.

Take It Yourself is near to Reemer's heart because it was a new idea; because the idea was hard to sell; and because he, himself, sold it. But the bulk of his business is still on the 'orthodox' side.

He claims that his charges are the highest in the trade—but that, in terms of quality, they represent the best value.

Quality checks

Consistency is achieved by investing heavily in modern equipment; by insisting on hospital standards of cleanliness in his darkrooms; and by ensuring that each print undergoes quality checks, with written reports, at seven stages.

Reemer believes that only top-line men produce top-line work. He attracts such men by paying high wages; holds them by providing incentives and scope for initiative.

Because of the incentives system an operator can more than double his basic wage. Through the allocation of points, it sets a premium on responsibility. Whereas an

operator may earn a £1 bonus by dealing with an order expeditiously, he may lose twice that sum if he lets a batch of faulty prints reach the client or breaks a delivery promise.

Each printer has his own dark-room, with individually-controlled air conditioning and a personal radio. He is also responsible for specific accounts—an important factor in delegation.

House loans

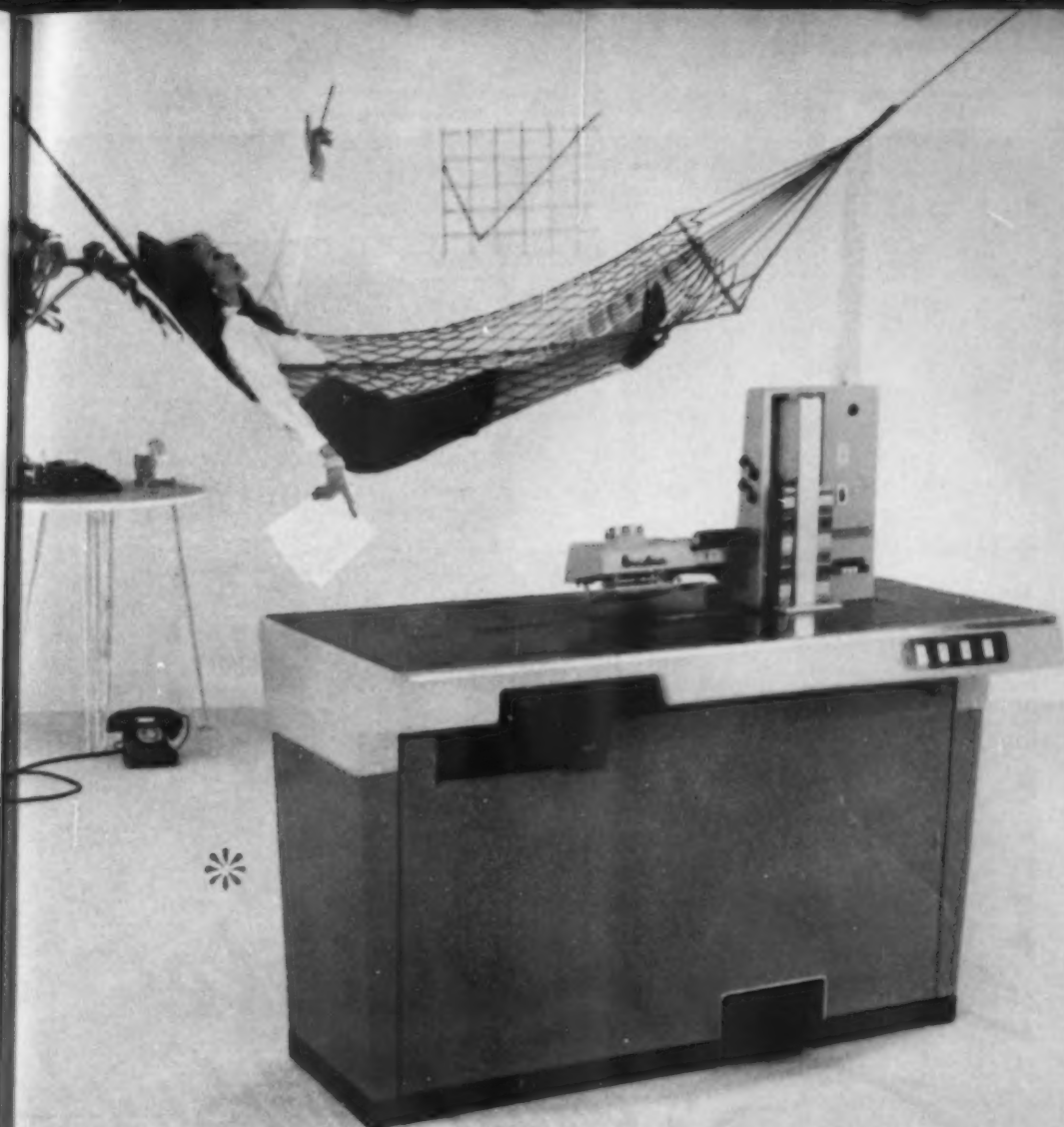
To persuade good men to stay with him, Reemer considered the introduction of a superannuation scheme. It was difficult to obtain just what he wanted. So he compromised by introducing a system under which an employee can borrow money to put down on a house. These loans are interest-free and have to be repaid at the flat rate of £50 per year—weekly deductions from wages would only create non-productive paperwork. Of course the double-motive of this gesture is recognized but no one expects the boss to play Father Christmas on 365 days a year.

Reemer thinks that it is difficult, if not impossible, to put into an established business the sort of effort that goes with a new unpredictable enterprise. Now that Take It Yourself is out of the 'unorthodox' class he is anxiously looking for new ideas to keep him at the office until a late hour. With such stimulation, he believes, the regular side of the business is more likely to gain than suffer.

The next step is to be a motion picture Take It Yourself service. This will present an entirely new set of problems.

Roy Reemer—slim, quick-talking, and with a taste in whiter-than-white ties which look as though they are capable of fogging undeveloped rolls of film—owes some of his success to a flair for selling. Even more of it is due to his belief in the value of salesmanship and his natural love of it.

Also he is a sincere man and has the happy knack of injecting this sincerity into his sales-talk. END

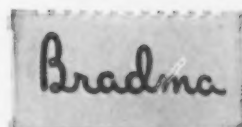


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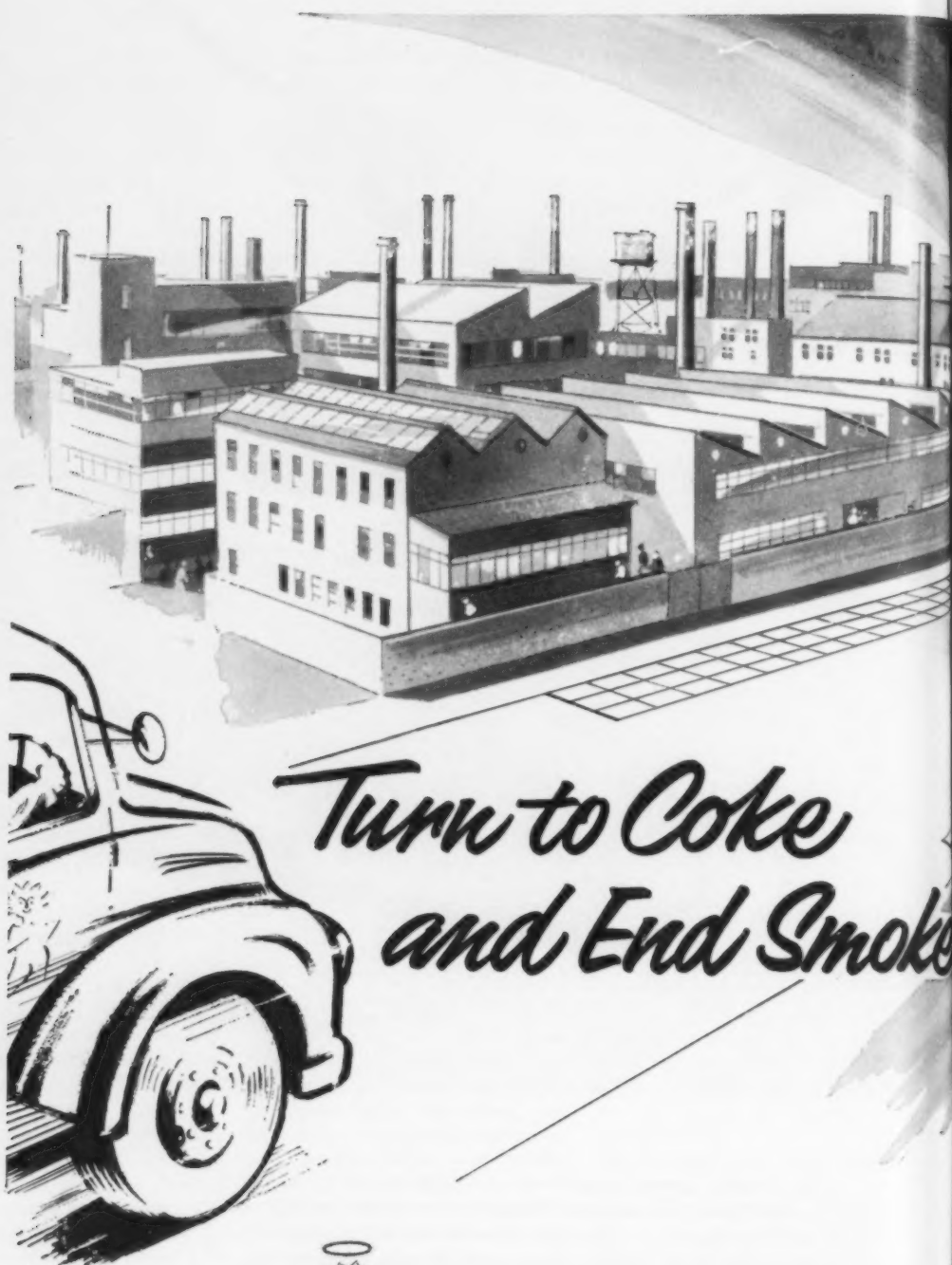


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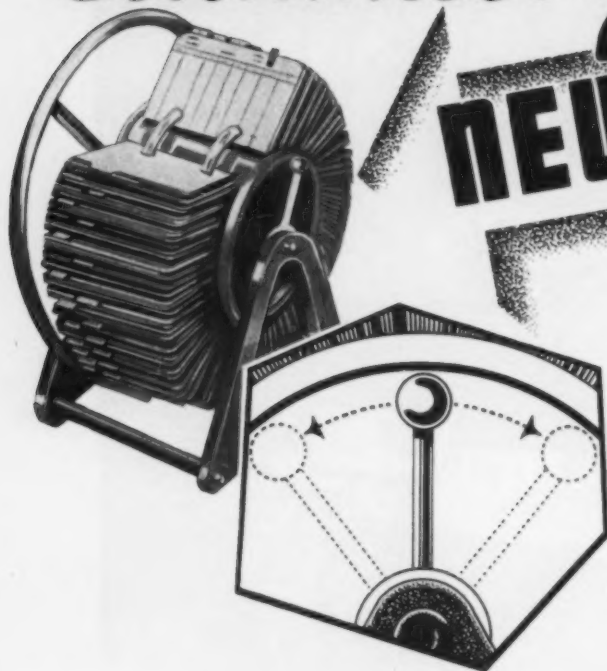


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**Under this system, head office do all the work and worrying
— but they get several important benefits in return**

THE international reputation of Gillette razors and razor blades is maintained by effective sales effort in many overseas markets. This begins at the company's Isleworth, Middlesex, head office, where sales and stock statistics are put to unusually good use.

As far as the origination of stock orders is concerned, Gillette do not rely on the initiative of their overseas outlets. The statistics provide what is, in effect, an 'automatic' method of stock replacement.

The monthly routine is based on the monthly sales and stock return made by each Gillette overseas company or agent. There are 13 companies and 51 agents, but including branches, returns are received from 140 overseas territories. On the strength of these, orders for replacement stock are put in hand by the overseas sales department, which carefully follows up any overdue returns.

Thus the initiative is always with Isleworth—avoiding 'panic' orders and instructions, and also solving, as far as possible, the more serious problem of agents running out of stock. (Of course, the international situation is sometimes responsible for unavoidable difficulties.)

Three months' stock

Gillette reckon that their agents should carry a minimum stock of three months' supply of all lines: this is accepted as a normal condition of trading, and is the basis on which re-ordering and re-stocking is done.

From statistics of the overseas company's previous sales (see later) it is easy to fix an average monthly sales figure for each line. A formula is applied to this to bring out the

'Automatic' Ordering Helps Sales Forecasting

by B. C. Williams

total requirements which will maintain the agent's agreed stock level, taking into consideration the administrative time involved in handling the order, together with the time taken to deliver the merchandise to its final destination.

Control of orders

The figures thus arrived at are compared with the stocks in hand and in transit, as recorded on the agent's stock return. This shows the exact quantity of merchandise which has to be dispatched.

The benefits of the 'automatic'

order routine are felt at many points in the organization. It makes possible more efficient production schedules, simplifies and reduces stock holding; and also helps dispatch, especially in respect of the forward booking of shipping space.

However, it is on the statistical side—in overseas sales forecasting and control—that the greatest value is found.

Sales statistics

From the overseas agent's stock and sales return, details are transferred to a *Kalamazoo* Summariser

form (see illustration). For every territory there is one form per month. The forms are specially punched so that a number of items can be placed on the divider of a visible binder in overlapping sequence. In this way the details on one form can instantly be seen and compared with others on the same divider.

One divider accommodates the statistics for one territory (let us call it Territory 'Z').

One form records one month's sales.

On the form are listed in groups the whole range of products sold. To the right of this list are two columns: 'average monthly sales for the year to date' and 'actual sales for the month'. To the left, are two other columns: 'per cent of previous period' and 'year's sales to date.'

The sales picture is built up as follows:

On the divider for Territory 'Z', the monthly forms for that territory are placed in date sequence, partly overlapping one another (as explained above).

On the extreme right is placed the form for the first month of the financial year.

On top of this—but leaving visible the column showing the monthly sales—is placed the form for next month.

Each month is added in this way, so that the current month's figures and those for all preceding months of the year can be read right across. Since the top form gives (as mentioned already) the average monthly sales and the total sales to date, there is a completely up-to-date sales picture for the territory.

The form giving total sales figures for the previous year is placed by itself on the extreme left of the divider, thus giving an over-all comparison with the previous year.

Here are some of the practical advantages of producing export sales statistics in this particular form.

Forecasts. The Export Director



One form records a month's sales for a territory. By means of the divider figures for the current month and all preceding months can be totalled and read right across



Binders are a convenient means of storing sales forms. Figures relating to any month or territory are quickly traced. Statistics for Gillette products throughout the world are stored in the space shown here

at Gillette holds a quarterly planning meeting, one purpose of which is to prepare forecasts of future requirements. Here the visual presentation of sales statistics helps considerably (although other factors bear upon the problem as well). Also it throws light on such overseas sales problems as the development of different territories.

Standardization. By means of carbon copies, identical figures can be maintained in overseas territories. This enables a visiting representative from head office to study sales figures presented in a manner with which he is entirely familiar. The standard system is in operation in all Gillette

companies, and also in a number of the agencies.

Photocopies. Gillette overseas sales representatives often undertake lengthy sales tours. A representative cannot take with them the sales figures which he will want in, say, two months' time. But the Overseas Sales Department keeps him in the picture by arranging for photographed duplicates of the visible divider to be airmailed to the territories to which he is proceeding. As the itinerary of the representative is known at the head office, it is easy to keep him completely in touch with the situation in this way.

END

BUSINESS

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Firm

Address

Nearest Town

GSB.166c

Small firms get big-firm advantages by contributing to a collective health centre. Their employees enjoy benefits which could not be afforded otherwise.



Harlow's health scheme covers over three-quarters of the employees on the two industrial estates. Nurses tour both estates every morning (left) and doctors visit factories regularly (right).

Health Centre for Smaller Firms

by Robert Wendell

"ONCE they join they can forget all about health—if you see what I mean." Though not to be taken quite literally, this statement by Lord Taylor, Medical Director of the Harlow Industrial Health Service, sums up the extent of the service's contribution to Harlow's industry.

He was referring to the 40 member firms of the two Harlow industrial estates who can rely on a complete casualty service which does over 60 treatments a day. Half of these are performed on the factory sites, quickly and efficiently. The savings in working time—and suffering—are considerable.

The largest firm in the service has

1,000 employees, and the smallest—three. The smallness of most of the member-firms shows the big advantage of a collective health service. Wherever there is a concentration of industry within, say, two miles, firms that cannot afford their own medical officer (only 2 per cent can)—or even their own nurse—can form and subscribe to a service equal to that normally available only to the large concern.

In eight years, the population of Harlow has grown from 5,000 to over 40,000. The ultimate population of the town is 80,000—about the size of Cambridge. Over 60 factories have been built on two industrial estates.

When, in 1955, the Harlow service opened its doors, there were 13 member-firms. Now, with a membership of 40, it covers well over three-quarters of the town's industrial employees. Four medium-sized firms, together with a number of small ones, remain outside the scheme—though all use it in an emergency. These are under gentle pressure to join, but most of them are woodworking concerns and claim particular susceptibility to slumps.

Cost

The cost to each member firm is £2 a year per employee for those

continued on page 122

FOUR-DRAWER FILING CABINET

NOW ONLY
£16-0-0
PLUS 12/- P. TAX

Now it costs even less to buy a genuine Vickers steel filing cabinet. Sturdily constructed, rust-protected before assembly, this filing cabinet will give years of hard wear. Recent accelerated life tests have proved that the runners last far longer than many competitive makes. Similar price reductions have been made to 3, 2 and 1-drawer models.

Attractively finished in high quality (grey or green) stove enamel a Vickers filing cabinet represents an investment that will pay dividends for years to come.



VICKERS
CABINET-MAKERS IN STEEL

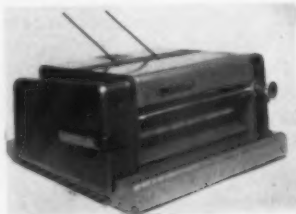
reduce the cost of filing!

VICKERS-ARMSTRONGS (ENGINEERS) LTD 6 POWDER MILL LANE DARTFORD KENT

OFFICE

Dyeline photocopier is economical

Reasonably priced, the new *Azoflex Combine 105* dyeline photocopier is also economical in use. Unlike most machines of its type, it can be switched on and off when required and needs no warm-up period.



Also makes reflex copies

Fluid distribution is arranged in such a way that only the minimum required for actual operation need be thrown away at the end of the day.

Since it employs the dyeline process, the machine copies from translucent or transparent originals. This it does at a speed of about two per minute and a cost of about one penny per copy. A new type of ultra-fast sensitized paper is used. Opaque originals can also be copied by the reflex process. In this case a first copy is made on a special foil which produces a transparent reproduction; this can then be copied in the usual way.

Operation and maintenance is extremely simple. Copying is done in two stages by feeding the original and copy successively through two sets of rollers. Exposure and development times are set by a dial in front. Lamps and fluid tank are immediately and easily accessible for replacement and refilling.

Enquiry Ref. No. 02/1

New ribbons improve heat-transfer copying

Designed specially for making documents to be copied by the heat transfer process (the *Secretary* is an example of a machine of this type) are *Copyfax* typewriter ribbons.

Available in a range of colours including green, red, blue and brown, they produce impressions which yield more satisfactory copies than standard types in the same colour. The actual colours do not, of course, appear in the copy.

Copyfax ribbons are the same price as standard grades by the same manufacturer.

Enquiry Ref. No. 02/2

New portable dictating machine

New to the British market is the *SoundScriber 200 BIC*—a pocket-size dictating machine which uses 15-minute expendable discs. The machine weighs 6lb. and is powered by four 2 LP torch batteries. Life of these is about



Records on expendable discs

20 hours—equivalent to at least 80 discs.

Corrections, letter endings, and special instructions can be marked directly on the disc, and are easily located when transcribing. No extra amplifiers are required for recording purposes. A newly developed transistorized pre-amp microphone plugs in to pick up interviews, lectures, conferences, etc. Recordings can easily be edited.

Being only 2½in. high, 6¼in.

wide, and 10in. long, the machine can be carried in the hand, worn over the shoulder like a camera, or packed into a briefcase. The front access cover closes and locks in place only when the instrument is turned off and arms are in 'carry' position. The recording head is magnetic with permanent diamond stylus, and the playback head is a ceramic cartridge with sapphire stylus.

Discs can be mailed back to the office in envelopes, three for the minimum airmail ½oz. postage. They can also be played back on a 33½ r.p.m. gramophone.

Enquiry Ref. No. 02/3

Electric heater for sealing wax

In mailrooms where a good deal of sealing wax is used this new electric heater will be useful. Designed specifically for this purpose,

How to Get Further Information

Executives can obtain full details of products reviewed in this section of *BUSINESS* by using one of the New Equipment Service cards facing page 100.

Each item in the section has a reference number. The numbers of items on which further information is requested should be written clearly on the card.

The service is free and no postage stamp is needed.

* Equipment included in this survey is selected for its news value alone. Manufacturers are invited to submit details of new and interesting products for consideration. An original photograph should accompany each item submitted.

it is made in two models, one for wall mounting, the other for full mobility.

The heater, which works from the mains, has a neon on-off indicator



For easier parcel sealing

lamp. Finished in chrome and black, it is supplied with three yards of flexible cable. With the wall model, fixing screws are included.

Enquiry Ref. No. 02/4

New cheque signer saves time

Claimed to be the smallest and most compact document signer in the country, the *Todd Model 94* cheque signer can process up to 500 documents an hour, although it is hand-operated.

To guard against improper use, two keys are necessary to operate the machine, and the absence of



500 signatures per hour

either prevents it from working. Signature plates can be removed from the machine for safe keeping.

No smudging can occur, since the signatures are dry-printed on to the document from ribbons. Signature plates are made to carry one or two names, and trademarks, monograms, crests or other special markings can be incorporated if

desired. A coloured background can also be printed as an additional safeguard against forgery.

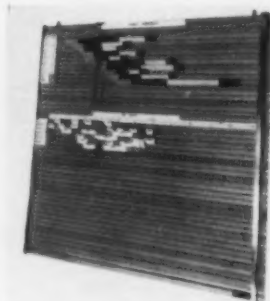
By adjusting a guide-plate at the side of the machine, larger documents such as share certificates, dividend warrants and circular letters can be signed in any position.

Enquiry Ref. No. 02/5

Made-to-measure wallchart

Very simply operated by the fingers, the new wallchart illustrated here can display a large amount of information without being complicated to use.

There are no pegs or strings. Basically the chart consists of an aluminium board with horizontal, serrated channels. Individual requirements can be met since any depth or number of channels can be ordered. Strips of coloured



Has movable channels

card, also with serrated edges, are dropped into the channels where they automatically lock into place.

The chart can be set up for many different purposes. In the illustration it is being used for two simple production jobs. On the left, the channels are keyed by plain cards, and at the top of the chart are examples of keying dates, percentages, etc. against pre-decided programmes. An insert rail to the right permits the horizontal channels to be moved, complete with cards, should any delay in the schedule occur. The date is indicated by a moving cursor.

Other uses include stocks, finances, contracts and so forth.

Used with imagination, this chart could, by obviating searches through masses of documents, be an effective time-saver.

Enquiry Ref. No. 02/6

Low-price pen for office use

An extremely low-priced ballpoint pen, the *WoKo* is designed for office use. Made without a protective cap, it is discarded when the ink is used.

The pen, which has a standard-size reservoir, is available with red, black, green or blue ink.

Enquiry Ref. No. 02/7

Easy-to-load trolleys

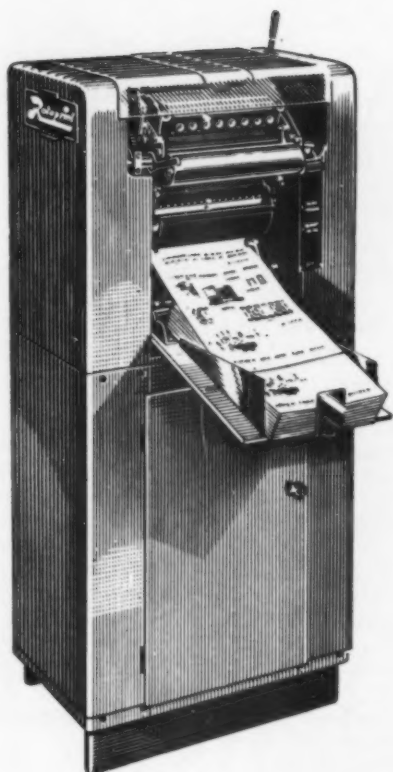
Illustrated here is one of a series of new transporter trolleys. There are two- or three-deckers, each made in two sizes.

Two-deck models are 19in. wide and 22½in. high; the length is either 25½in. or 36in. Three-deckers are 19½in. wide, 37½in. high, and either 28in. or 38½in. long. Distance between shelves is 14½in. in all cases. A sensible feature of the design is the single vertical strut at one end of the shelf, which makes loading easier.

The trolleys are made from steel tube and sheet, and fitted with 5in. heavy-duty rubber-tyred castors. Finish is in stove enamel in pale primrose, gull grey, pastel blue or green. Other colours and



Finished in pastel colours



HOW SIMPLE CAN IT GET?

Without claiming to have reached the ultimate in simplicity—not even in the R.70—we do say most emphatically that this machine will transform the production of printed matter from an involved and irksome chore to a straightforward part of internal routine. The R.70 is so easy to use that any intelligent person can start producing first-class black and white material within a week. Troublesome damping rollers are eliminated by the patented Rotafount damping system—exclusive to Rotaprint machines. Inking and paper feed are automatic. Plates are changed with the snap of a spring—no screws or tools—and the machine is operated by very simple controls.

Apart from dealing effectively with printing work of all descriptions—letterheadings, sales folders, ruled forms, etc.—the R.70 is ideally suited for every duplicating requirement. It's fast, versatile, and above all easy to operate.

Rotaprint

HOW SIMPLE CAN IT GET?

ENQUIRY FORM		H 13
Please send, without obligation, printed specimens and full details of Rotaprint		
NAME _____		
DEPARTMENT _____		
Pin this Enquiry Form to your letterheading and post to ROTAPRINT LTD · HONEYPOT LANE · LONDON NW9		

Complexity breeds inefficiency, and nowhere is this more obvious than in a badly organised printing and stationery department. Rotaprint reduces administrative problems of this sort to a minimum. Storage space is reduced too. Instead of stocking cumbersome heaps of printed material, any number of Rotaprint plates can be kept in an ordinary file until needed for reprints. When a particular item of stationery is required in quantity the appropriate plate can be brought out, clipped quickly into position, and within minutes a supply is ready for use. Simplicity itself!

ROTAPRINT LIMITED · ROTAPRINT HOUSE · HONEYPOT LANE · LONDON NW9 · Tel: COLindale 8822 (12 lines)

R.I.A.

New EQUIPMENT

OFFICE

non-standard sizes can be supplied if required.

Enquiry Ref. No. 02/8

New lotion removes hectographic ink

The makers of a new liquid hand cleanser, *Olan*, maintain that it will gently but instantly remove hand-



Gentle, yet effective

stains caused by changing type-writer ribbons, or using hectographic carbons, all kinds of inks, paints, oils, etc. The lotion is applied direct to the hands, and rinsed off with water.

Supplied in an attractive squeeze flask, it is smooth and pleasantly scented. Refills can be obtained in capsules.

Enquiry Ref. No. 02/9

Pocket machine adds and subtracts

Smallest yet in the *Addmaster* series, the *Baby* would be a useful and inexpensive item for those who do not trust their mental arithmetic. Small enough to slip easily into a pocket, the machine has a coloured case on which the makers print a name, if required.

The machine operates by a stylus which is inserted into holes on its



Sterling or decimal models

faces. Addition is done on one side, subtraction on the other. The sterling model has a capacity of £999 19s. 11d.; for the decimal pattern capacity is 999,999.

Enquiry Ref. No. 02/10

LET NOBLE LOWNDES ADVISE YOU ON

Staff Pensions

Since no two businesses are identical every pension scheme must be individually designed and serviced if it is really to fulfil the requirements of the employer. Widely varying degrees of seniority, length of service, productivity, responsibility and remuneration must be balanced and assessed against the background of the financial and administrative structure of the company or firm in question. This is a job for specialists. NOBLE LOWNDES are the largest and most experienced pension scheme consultants in the British Commonwealth. They have pioneered every

major development in pension planning in this country for the past 25 years, including, for example, the first Top Hat scheme, and also the first cash gratuity scheme to be insured for hourly-paid employees.

NOBLE LOWNDES employ actuaries, accountants, statisticians, *legal and taxation experts*, and other pension specialists selected from 48 different insurance companies. Each of the 3,500 Companies—large and small—among our clients receives the same high degree of individual attention and service.

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with...



This new high-speed machine will sort into separate bags 400 coins per minute, consisting of half-crowns, florins, shillings and sixpences, or will sort, as a separate operation, pennies and halfpennies. The machine can easily handle up to £1,500 in assorted coins per hour.

and the
Vee-Three counter

The Vee-Three counter is a sensational time and cost saver. It counts 2,000 sixpences and ascending denominations up to 1,200 half-crowns per minute.



These two machines are further examples of exactly the right, efficient machine for the job and already in use in a great variety of industrial and business organizations.

**International Coin
Counting Machine** Co Ltd.

17 Alexandra Rd., Enfield, Middlesex, HOWARD 3207
BRANCHES and AGENTS—Belfast, Birmingham, Bristol, Dublin,
Edinburgh, Glasgow, Leeds, Liverpool, Manchester, Reading,
Shrewsbury. Also the Dominion of Canada by Rand Equipment Ltd.



—they also make letter openers!

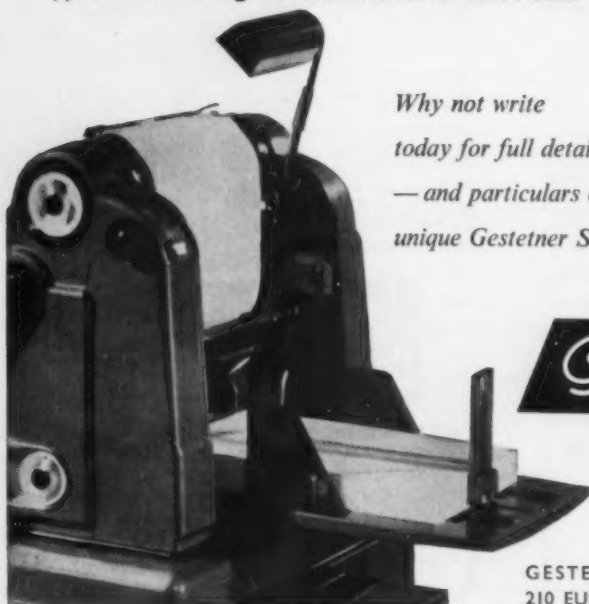
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always ready for instant use

If quality and clarity of reproduction were the only criteria, no one could dispute the supremacy of Gestetner. In practice, however, other factors have to be taken into account. Simplicity, dependability, versatility, speed. Consider, then, some of the unique technical features that contribute to the outstanding operational efficiency of the Gestetner 260.

- ★ The machine is always ready for instant use—thanks to automatic sheet-by-sheet inking
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WORKSHOP

Sterilizer for First Aid Room

Designed for factory first aid room or welfare centre, the *Surgical* cabinet sterilizer is electrically heated and has a seamless drawn boiler with easy-clean rounded corners.

Lid and tray are lifted simultaneously by means of a foot pedal,



Compact, easily operated

freeing the operator's hands. An oil check returns the lid silently. The cupboard is illuminated when the door is opened and has two plate glass shelves.

Colour is cream.

Enquiry Ref. No. W2/1

Truck manipulates drums or barrels

Hydraulically operated by hand, battery or mains power, a new range of *Jacacaddy* trucks, fitted with squeeze clamps, lifts drums over vats and pours their contents at a controlled rate. This ability to lift and turn enables the trucks to handle bales and similar objects too, besides eliminating the need for pallets.

The standard model can lift drums weighing up to 5cwt. to a height of 6ft. 6in. and turn them through 180 degrees at any intermediate height. The range of trucks can be adapted to take

drums of up to 10cwt. and to lift to a height of 10ft.

The trucks straddle the barrel or other object to be lifted. The clamps are positioned at the required height and closed on the load. A preset valve ensures sufficient pressure for load-lifting without damage to the load.

Enquiry Ref. No. W2/2

New table speeds cloth handling

Faster output and reduced operator fatigue are the features of a combined cloth layer and cutting table.

It is capable of laying up 100lb. (about 150yds.) of knitted fabric in eight minutes. The cloth layer can either be fitted round an existing cutter counter or supplied as a



Output increased

complete unit with a plastic surfaced cutting counter. Any length or width can be supplied.

Enquiry Ref. No. W2/3

Glass tanks store corrosive liquids

Tanks made of armourplate glass are the answer to the problem of storing corrosive liquids.

Armourplate is polished plate glass which has great strength and high resistance to mechanical or thermal shock.

The sheets forming the tanks are held together by a rigid metal base frame with an external bracing of tension-rods and corner

Enquiry Service

The enquiry reference numbers after each item provide a simple method of getting further information on the products concerned.

Use the New Equipment Service cards facing page 100. No postage stamp is needed.

blocks. The narrow joints are sealed with continuous gaskets which resist corrosion. Visible-flow pipes are available for coupling to the tanks.

Industries already using the tanks include electroplating; tobacco manufacture; dyeing; laundering; and the wine, spirit and soft-drink industries.

Enquiry Ref. No. W2/4

Collapsible case speeds packing

Storage costs are cut and packing simplified by a collapsible plywood case which can be assembled in ten seconds by unskilled labour.

Chief features of the case are hinged sides and ends which fold into the base when the container is not in use. When in service they are locked in the 'up' position and



Light, strong, versatile

the case secured by metal tension bands.

Collapsed depth is only 2½ in. A wide range of lengths up to 36 in. is available. Although light, the case takes weights up to 2 cwt. Along with the smooth internal walls, these features make it suitable for a wide range of industrial products.

Absence of external battens saves freight costs and facilitates close, uniform loading when goods are dispatched.

Enquiry Ref. No. W2/5

New wrapping gives better protection

Irregularly-shaped commodities are given stronger sales appeal and better protection—especially when refrigerated—by *Shrinkwrap*. This new plastic film can be heat-sealed and is supplied in reels for overwrapping all types of meat, poultry and frozen foods. Application of moderate heat both seals and shrinks the film.

Smoother and clearer than polythene, the new material is very suitable for use in refrigerated displays, preventing 'freezer burn' and loss of weight in deep freeze conditions.

Enquiry Ref. No. W2/6

Plastic closure is re-usable

Polythene and other film bags can be secured by the *Vari-clip* adjustable plastic closure. Available in four colours, the clip is 2½ in. long, has four square holes at one end, with a toggle at the other. It



Gives airtight seal

adjusts to four diameters, ranging from ¼ in. to 9/16 in.

The bag to be closed is simply laid across the clip and the toggle twisted through the appropriate hole. Likely applications are for packing fresh foods, or goods where a completely airtight seal is unnecessary.

The clip can be used again and again. It gives the small packer an attractive seal at low cost, eliminating the need for expensive closing machines.

Enquiry Ref. No. W2/7

Barrel skid is stronger, lighter

Safe and easy handling are features of the new *Drum Master* aluminium barrel skid.

Only half the weight of steel skids of equal length and capacity,



Safe, easy to handle

it has replaceable wood battens positioned along the top of the metal section to prevent wear. Steel hooks at the end of the runners grip ramps, vehicle tailboards, and so on.

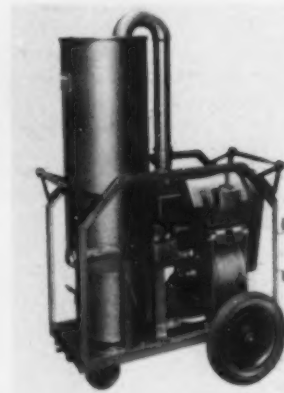
The skid is available in standard lengths of 8 ft., 10 ft. and 12 ft.

Enquiry Ref. No. W2/8

Vacuum cleaner for workshops

Specially designed for heavy duty operation, the 'CL' industrial vacuum cleaner is powered by a 5 h.p. electric motor and has a *Clear-Flo* filter that prevents harmful substances such as dust or toxic powders from recirculating through the workrooms. The filter traps particles as small as 0.1 micron, and

is guaranteed for two years. It has a greater suction power than any of its predecessors. The turning circle



Recovers products, ends dust

is little more than the machine's length, making for easy manoeuvrability.

Enquiry Ref. No. W2/9

Build-it-yourself gravity conveyor

With three simple components—slotted angle, *Glidewheels* and punched strap—manufacturers can now construct the type of gravity conveyor they need in almost any position. It is quickly built, smooth-running and quiet.

The simplicity of the wheels eliminates the need to fit tapered rollers on bends—cutting installation cost by as much as 40 per cent. Five of them easily carry 1 cwt.

Because they are light and have ball-race bearings, the wheels reduce the slope needed for smooth running. Packages of varying weight can be carried without the need to vary the height of the conveyor supports.

Enquiry Ref. No. W2/10

Handy spray oils machinery

Both metal and plastic bearing surfaces can be lubricated with aerosol *Anti-Scuffing Spray*. It is

LAMSON

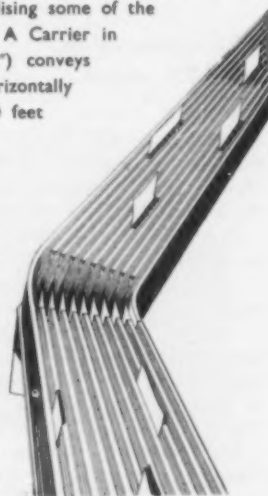


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PIONEERS THE CONQUEST OF INNER SPACE

Did you know that Lamson Carrier Airtubes are used to transmit steel samples, small spares, tools, surgical instruments, drugs, printing plates, documents and other items, speedily within organisations of all types utilising some of the unexploited Inner Space available? A Carrier in one of the larger systems (13" x 5") conveys loads of 7-10 lb. vertically and horizontally and at a speed of approximately 30 feet per second.

On the right is the new 'V' Trough Document Conveyor. Multi or single lane, for carrying cards, tickets, letters, etc., with maximum speed and economy of space. The document is moved on edge by a narrow belt. Each lane can be used for a different class of document, a different processing or direction.



Manufacturers of Carrier Airtubes, Conveyors, Pallet Loaders, Ventilation, Dust and Fume Extraction Plants, Portable and Central Vacuum Cleaning Plants, Postal Letter Chutes.

Now available
in Britain —

HAG TUBULAR FURNITURE

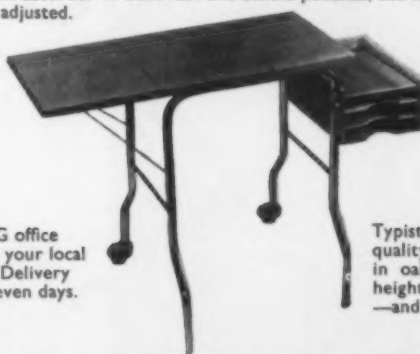
GIVES MORE EFFICIENCY — GIVES MORE COMFORT

HAG office furniture of Scandinavian design recently introduced to the British Market, offers an extensive range of tubular office chairs and contemporary designed typists' tables. These are made from high-grade chromium-plated steel tube and upholstered in Vinyl or moquette, in a popular range of colours. HAG office chairs are the last word in modern craftsmanship and comfort, with built-in shock absorber to back rest and centre pedestal, the height and angle being easily adjusted.



Plastic foam is used for seat and back, the covers can readily be removed and replaced. The castors are fully covered, and the wheels easily removable.

See HAG office furniture at your local dealers. Delivery three to seven days.



Typist's table of the same quality and workmanship in oak and mahogany—height 27½"—top 16" x 22"—and leaf 12".

Trade Enquiries

F. BRODERSEN (London) Ltd.

HAG TUBULAR FURNITURE

5 Earnshaw Street, London, W.C.2 Tel.: COV 2177

based on molybdenum disulphide and contains resin bonding which retains a film of lubricant.

The spray is also a quick way of oiling mechanisms during assembly.

Enquiry Ref. No. W2/11

CO₂ extinguisher has 15ft. range

Intended mainly for fighting indoor inflammable liquid fires and electrical equipment fires, the *Model 1510 Nu-Swift* supersedes the model 1210.

This new carbon dioxide fire extinguisher is leak-proof and has a 15ft. range—almost double its predecessor's—giving the fire fighter a bigger safety margin. A redesigned nozzle has doubled the extinguisher's fire fighting capacity, so that it can now put out an 18sq.ft. inflammable liquid fire.

The carbon dioxide used, although less efficient than dry

powder, is non-damaging and leaves no residue. It can also penetrate into otherwise inaccessible places.

Enquiry Ref. No. W2/12

Stroboscope for daylight use

Stroboscopic measurement of the speed of fast-rotating machinery can now be carried out despite strong background light. Previously such inspection has been possible only in darkened conditions because higher flash rates weakened the intensity of stroboscopic light.

A new stroboscope overcomes this weakness by using two gas discharge lamps alternately. Number of flashes per second ranges from five to 1,000, and flash duration from 8.5 to 31 micro-seconds. Peak flash illumination in mean spherical candle power ranges from 34,000 to 2,000,000.

The stroboscope has attachments for high-accuracy speed-measuring or photographic equipment. A frosted perspex diffuser is supplied for viewing objects in silhouette. The reflector and lamp housing are detachable.

Enquiry Ref. No. W2/13

Insulation bonded quickly and easily

Expanded polystyrene for thermal insulation can now be permanently bonded to normal roof or wall surfaces like wood, metal, asbestos, concrete, plaster, etc.

This is done by a specially developed new adhesive. A layer of it spread on the plastic and the surface to be treated becomes tacky after 15 minutes. Gentle pressure of the hand is then sufficient to bond the two surfaces.

Enquiry Ref. No. W2/14

CHOOSE A FLEXELLO CASTOR



Flexello CONSTANT QUALITY CASTORS

Choose your castors from the largest range in Europe. Flexello will meet your special requirements individually, while our fabricating division designs and manufactures "special" castors for extra heavy and difficult applications.

illustrated are a small part of our vast range

Write for illustrated leaflet to Dept. B

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BUSINESS



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It can be used as an accounting machine for three in one posting without carbons, as a Typewriter, or an Add/Listing Machine. Every Business Organisation has a potential application for this multi-purpose Machine suitable for the completion of SALES and PURCHASE LEDGERS, INVOICING, CHEQUE WRITING, TRADERS CREDITS, and H.P. RECORDS, etc.

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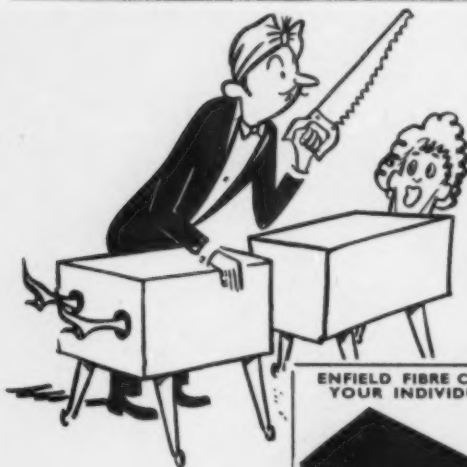
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BUSINESS

Better Buying

starts on page 70

to the subsidiaries. He also acts as a consultant to the subsidiaries' buying departments, visiting them from time to time and making recommendations. He reports and answers direct to one of the six executive directors.

His staff of about 20 includes an assistant manager with five specialist buyers.

Case history 4

Some large firms split up the purchasing function on the ground that routine buying should not take up all the purchasing officer's energies. This policy is followed by a well-known manufacturer of electrical goods, with ten factories in Britain.

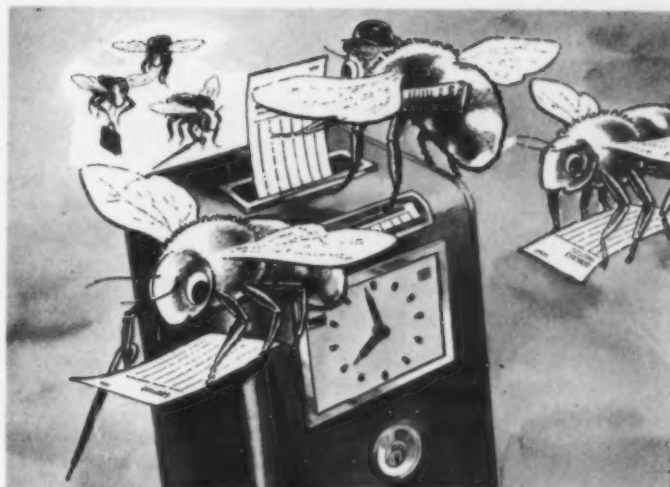
They believe the buying function should be split into routine section buying on one hand, and 'purchasing research' on the other. They think it important to have someone not directly concerned with day-to-day purchasing activities, who can study commodity markets, relative values, stock control, etc.—“an independent body quietly thinking all the time.”

Their chief buyer is more a consultant than an executive. He is an expert on world commodity markets and is responsible directly to the managing director for all purchasing methods and problems, and also for the engagement of new staff. Each of the ten factories have an independent buyer with a deputy and a number of section buyers and clerks.

The chief buyer's job is to keep an eye on the purchasing of the group as a whole. He sees that there is no hold-up in the production of any factory because of faulty supply. He maintains liaison with the research and development department on future requirements and new products. Over and above the factory buying, he is responsible for group contracts for items used by all factories, but it is up to the factory buyers to place orders based on the contracts.

END

FEBRUARY, 1959



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The Unwanted Visitor

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secretary. In this case, the procedure is: (a) Remember the appointment 'spontaneously'; (b) display a well-filled desk diary prominently on the front of your desk (a dummy can be kept for this purpose and filled in just before the visitor comes in if necessary). The game, is, however, undoubtedly more effective with two players.

The tenor of your own conversation and behaviour should, when possible, be subtly discouraging. "Well, George, what can I do for you?" is a good brisk opening which often aborts an intended cosy chat. Forget to offer your visitor a cigarette as you light one, or refuse his if he offers it to you. Keep the visitor's chair well loaded with files and clear it for him with an all-but-imperceptible sigh.

Don't labour the point of how busy you are, or you may be thought to be shooting a line. But if carried out with proper aplomb the cigarette ploy can be very effective. To highlight your state of nervous tension, light a cigarette; puff at it greedily and deposit it on the ashtray. Then, a few moments later, light a second, see the first, and laughingly draw attention to your absent-minded state. "Too busy, old boy, that's the trouble."

Let us now reverse the situation, and imagine that you are in the visitor's chair. Are you an angel, whose visits are, as the poets have put it, "short, bright, and far between"? Or has some dreadful metamorphosis taken place, so that you become the person you most detest?

Before you make an indignant denial, check your score on these questions:

- 1—How long is your average visit?
- 2—How many times have you referred today to: (a) the weather; (b) your car; (c) your cold?
- 3—Have you ever read 'The Ancient Mariner'?
- 4—Do you time your visits precisely, or do you leave a spare hour or so between appointments?

5—Do you roughly summarize what you have to say before you enter an office, or do you believe in the inspiration of the moment?

6—Have you ever analysed how great a proportion of your visits is allocated to: (a) your talking; (b) your host's talking?

7—Do you recognize boredom when you see it?

8—Have you ever devoted any time to studying the technique of how to withdraw gracefully from an interview?

9—Do you think that brevity is the soul of wit?

10—Do you seriously believe that anyone could be busier than you? If so, do you think that this is simply the result of bad organization?

We will assume that you have come through this test well, and may therefore be described as a considerate guest. You may then logically classify yourself as a victim if your visits last too long.

Is there anything you can do? Yes—with a little ingenuity.

1—Announce, tactfully but firmly when you arrive, that you are (through no wish of your own, of course) obliged to keep another appointment in half an hour's time. This gives you a legitimate excuse for not-so-furtively consulting your watch at intervals.

2—Make your responses to irrelevant remarks polite but brief.

3—If you have relevant papers with you, open your brief case immediately.

4—If really desperate where you know your host is incurably garrulous, arrange for your secretary to ring you at his office with a prefabricated crisis. (This requires careful timing and well-judged cross-talk loaded with hidden meaning.)

A superbly flattering parting gambit was invented by a well-known doctor. On leaving his more influential patients, he was heard to remark: "Dear me, how time has flown. I'm already late for my next appointment." Only his chauffeur knew that he was always punctual.

END

BUSINESS

A Game of Managers

continued from page 79
forgotten.) The test administrator, in turn, describes the movements of the economy and compares the policies and results of the three companies.

Wall charts, prepared from the operational summaries, are used here.

Possible developments

While the first model is designed to 'broaden' middle management, IBM hope to apply the same technique to more specialized training areas, such as systems work, stock control, marketing, and research and development. Much depends on the response by training bodies and individual firms.

Universities and technical colleges wishing to stage sessions at the data processing centre can take advantage of a new 'half price' rental scheme for academic research. Under this, the hourly charge for the 650 computer and ancillary equipment is reduced from £36 to £18.

According to Dr. Truman Hunter, who is responsible for executive development in the international corporation, the basic techniques of the game may eventually be used for research into management training methods and also into decision-making itself. From this might be developed some method of evaluating an executive's decision-making ability with as much capacity as the psychological tests used in other fields.

One possibility is research into 'reflex decisions'. There are grounds, says Dr. Hunter, for suggesting that some businessmen have a tendency always to react in the same way to certain conditions—which may or may not be appropriate to the business situation in which they occur. The results of decision-making laboratory sessions might disclose such biases, allowing some form of correction factor to be applied.

END.

FEBRUARY, 1959



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Health Centre

starts on page 105

without a works nurse, and £1 for those with one. As with the similar scheme at Slough, the service was brought into being through the efforts of the town's industrialists and the Nuffield Provincial Hospitals Trust. An initial grant of £18,000 was provided by the trust to be spread over five years. Within this period the scheme is to become self-supporting as members' subscriptions increase. During its first two years the service had an annual deficit of about £4,000. While costs have about reached their maximum, subscriptions have increased considerably; this year the deficit should be much less.

To the small firm which does not 'think big,' it looks like an expensive luxury. The loss of working time through slight injury and illness seems to loom more important to the large organization.

Part-time doctors

Before the service started, a few of the larger firms had their own doctors; some others had nurses. A recent survey of factories employing more than 50 people shows that only 25 per cent do employ nurses. Many smaller firms find that, owing to her relative inactivity, a nurse's ability deteriorates.

Most had to send ailing workers to their own doctor in town or to the nearest hospital, six miles away. Most of the time lost was in travelling. Frequently too, employees had to report for repeated treatment—injections, change of dressing, etc. The travelling and waiting added up to hours lost to the firm.

Now the picture has changed. In Harlow's industrial army the doctors are up front. Boils, backaches, and breakages are attended to straight away. "It is in the proper treatment of minor injuries that the scheme is really worth while," says Lord Taylor.

Harlow have borrowed many ideas from the pioneer project at Slough, but in one respect the Harlow service

differs radically. It employs no full-time doctors.

All general practitioners at Harlow work in group practice, and provide medical cover for the service on a sessional basis. Each G.P. does between one and three sessions per week. This means he is on call for four hours at a time, during which he visits the health centre at least once at a regular time. Workers requiring attention attend this scheduled surgery. In emergency, the doctor can be summoned by telephone at any time. There is always a G.P. on call, night and day, including weekends.

Besides his duties under the rota system, each G.P. has two or more factories allocated to him for general advisory purposes. He visits these firms weekly, monthly, or quarterly to discuss with the management any health problems they may have, and also to examine workers exposed to special risk.

Dr. Taylor thinks the G.P. is the ideal man for the job. "For a given sum of money, the best value is obtained by employing well-paid part-timers." This has the big advantage that practitioners not only tend their patients in their homes but also at their work, and can thereby ensure that medical care is continuous and co-ordinated.

The rest of the staff comprises three full-time and two part-time nurses, a part-time secretary, and a full-time receptionist. The nurses tour each estate every morning, and hold a surgery in one of the larger firms.

In addition to the daily coverage, foot, eye, and skin clinics are held monthly, and one evening a week is devoted to chiropody.

Executive check-ups

A new and very popular development is the provision of facilities for examining executives. Equipment includes an electric cardiograph, and examination is by appointment. Extra charge is made for this, an increasingly popular device to check on management's health.

Not the least important of the service's contributions to local industry is the issuing of well-stocked first aid boxes to all member-firms. The service trains someone from each firm to use the box.

Administration of the scheme is by a council of management. The employers are represented by eight members of the council, the Nuffield Trust two, the Nuffield Foundation two, the B.M.A. one, and the T.U.C. one. Also represented are local bodies such as the Harlow Trades Council, and Essex County Council.

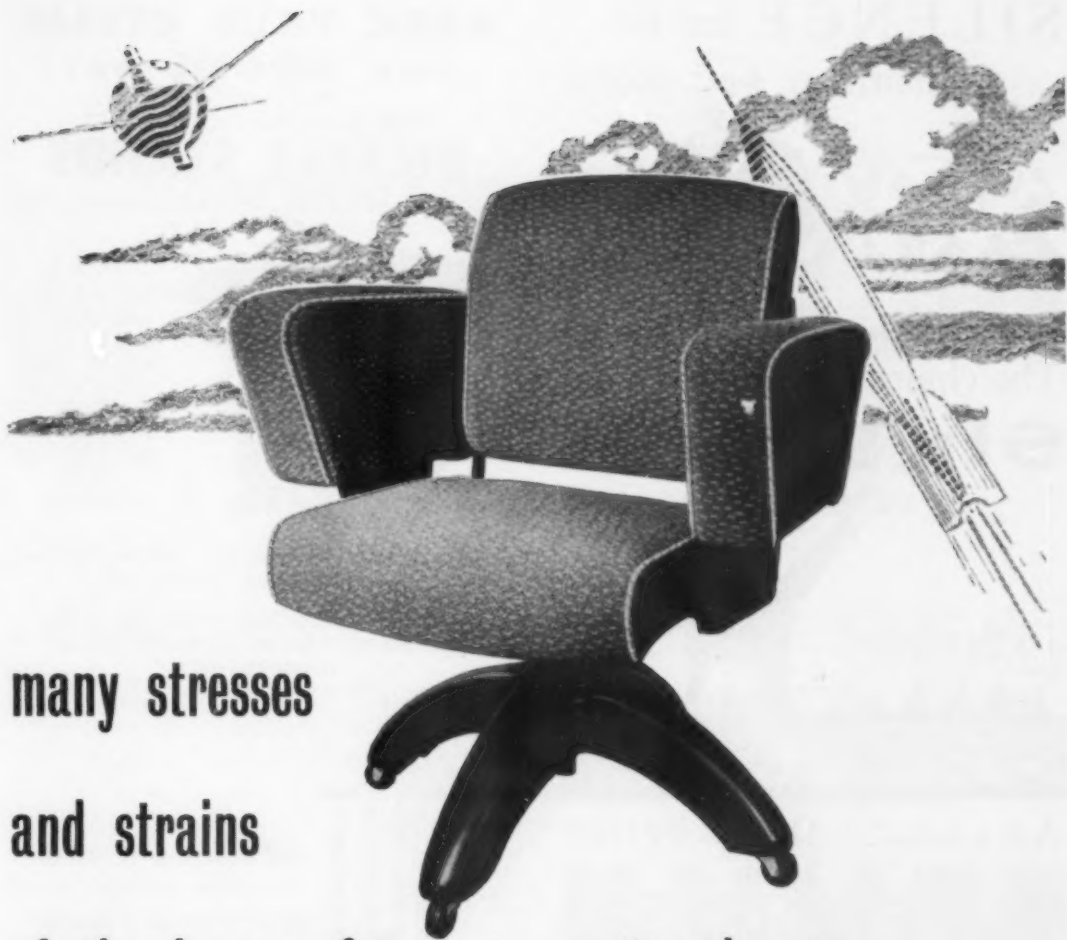
Circumstances in Harlow are not special. Wherever there is a substantial concentration of industry and willingness to co-operate in tackling common problems, similar schemes could prove just as valuable.

END

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Does your thinking take account of changing values? So many things have gone up in price—labour, machinery, supplies, professional services and finished goods. This table, based on the retail price index, gives you a rough set of conversion factors for bringing your values up to date. For example, if you spent £100 on a machine in 1931, for which year the conversion factor is 2.9, then you could hardly be surprised if a similar machine now costs £290. It may actually cost more or less, but you would expect values generally to be around 2.8 times the 1931 level. This table will be brought up to date every quarter, but published monthly for hand reference.

Year	Con- version Factor	Year	Con- version Factor
1913	= 4.26	1935	= 2.96
1919	= 1.97	1936	= 2.90
1920	= 1.72	1937	= 2.76
1921	= 1.90	1938	= 2.71
1922	= 2.33	1939	= 2.65
1923	= 2.44	1946	= 1.72
1924	= 2.44	1947	= 1.62
1925	= 2.44	1948	= 1.56
1926	= 2.48	1949	= 1.52
1927	= 2.55	1950	= 1.48
1928	= 2.58	1951	= 1.31
1929	= 2.61	1952	= 1.22
1930	= 2.71	1953	= 1.20
1931	= 2.90	1954	= 1.16
1932	= 2.96	1955	= 1.09
1933	= 3.03	1956	= 1.07
1934	= 3.03	1957	= 1.02



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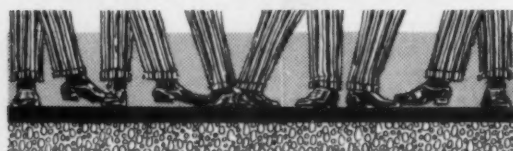
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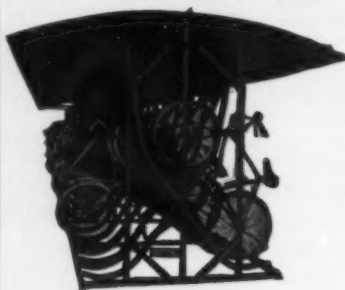


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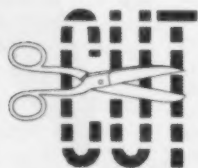


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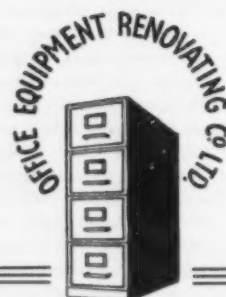
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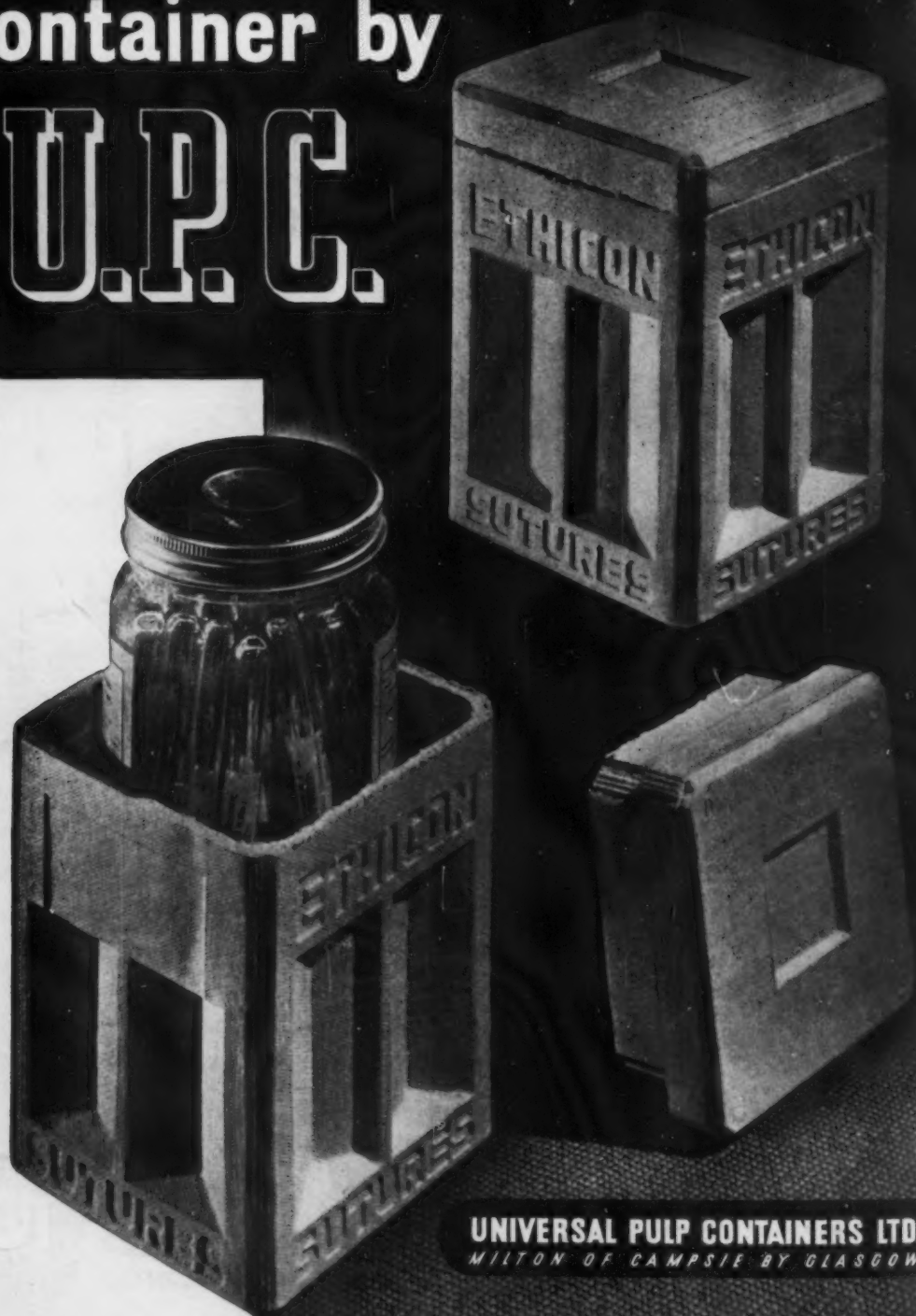
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